

UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

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STATE OF NEW YORK, et al.,

06-CV-1133

Plaintiff,

-against-

United States Courthouse  
Central Islip, New York

NEXT MILLENNIUM REALTY, LLC,  
et al.,

April 11, 2016  
10:00 a.m.

Defendants.

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TRANSCRIPT OF PROCEEDINGS  
BEFORE THE HONORABLE SANDRA J. FEUERSTEIN  
UNITED STATES DISTRICT JUDGE

APPEARANCES:

For the Plaintiff:

ERIC T. SCHNEIDERMAN  
Attorney General of the  
State of New York  
New York State Department of Law  
Environmental Protection Bureau  
120 Broadway  
New York, NY 10271  
BY: DANIEL F. MULVIHILL, ESQ.

For the Defendants:

KEVIN MALDONADO & PARTNERS, LLC  
5 Hickory Hill Road  
Windham, NY 12496  
BY: KEVIN MALDONADO, ESQ.

Court Reporter:

Mary Ann Steiger  
100 Federal Plaza  
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Proceedings recorded by mechanical stenography.  
Transcript produced by computer.

Mary Ann Steiger, CSR  
Official Court Reporter

1 THE CLERK: 06-CR-1133, State of New York, et  
2 al, vs. Next Millennium.

3 Counsel, please state your appearances for the  
4 record.

5 MR. MULVIHILL: Daniel Mulvihill, counsel for  
6 the State of New York and Basil Seggos.

7 MR. MALDONADO: Kevin Maldonado, counsel for the  
8 Frost Street parties; 101 Frost Street Corp., Next  
9 Millennium Realty, 101 Frost Street Associates and the  
10 estate of Emily and Jerry Spiegel.

11 Judge, at this point, I would like to make a  
12 motion to dismiss the estate.

13 There's been no affirmative proof they're either  
14 a generator, operator or arranger under CERCLA, and the  
15 same with respect to 101 Frost Street Corporation.

16 There's no proof at all that would satisfy any  
17 of the categories of CERCLA.

18 MR. MULVIHILL: Your Honor, as I just mentioned,  
19 we would consent to the dismissal against the estate of  
20 Emily Spiegel.

21 We differ with respect to 101 Frost Street Corp.

22 Under Supreme Court precedence set forth in  
23 United States vs. Best Food, 524 U.S. 51, 1998, an  
24 operator is someone who manages, directs or otherwise  
25 conducts operations, and that includes decision making

1 with respect to environmental -- compliance with  
2 environmental regulations.

3 In a recent Third Circuit decision; Litco New  
4 Jersey, Inc., vs. The Commissioner of New Jersey  
5 Department of Environmental Protection, 725 F.3d 369,  
6 2013, the Third Circuit noted that in the case of current  
7 operator, as opposed to past operator, the plaintiff is  
8 not even required to show that the party was an operator  
9 when active disposal of waste --

10 THE COURT: Yes, I read a lot of cases on that.

11 MR. MULVIHILL: Okay.

12 We think the evidence that we moved in shows  
13 that they signed an administrative consent order with the  
14 New York State Department of Environmental Conservation  
15 with respect to the remediation.

16 THE COURT: And you don't deny that?

17 MR. MALDONADO: Yes, your Honor, that's correct.

18 MR. MULVIHILL: We think that's evidence that  
19 they are making decisions on behalf of the parent company  
20 with respect to compliance with environmental regulations.

21 THE COURT: Okay.

22 MR. MALDONADO: Judge, just because they signed  
23 a consent order in 2006 doesn't mean at the time of  
24 disposal they had anything to do with disposal,  
25 supervising the disposal or in any way involved.

1           THE COURT: Correct me if I'm wrong, I think  
2 there are cases that indicate that they don't have to be  
3 actually actively participating in the disposal at the  
4 time.

5           MR. MALDONADO: That's correct, but they need to  
6 be around at the time. This corporation didn't even exist  
7 at the time of the disposal.

8           MR. MULVIHILL: Your Honor, the case that I  
9 cited, that case was a single shareholder who had  
10 purchased --

11          THE COURT: Subsequently.

12          MR. MULVIHILL: Subsequently purchased the  
13 property afterwards and --

14          THE COURT: Why don't you give me a hard copy of  
15 that case and I'll give you my decision probably tomorrow  
16 okay.

17          MR. MULVIHILL: Thank you, your Honor.

18          THE COURT: Let's go forward.

19          MS. LEVY: Your Honor, if I may, I am Assistant  
20 U.S. Attorney Sandra Levy for the Eastern District of New  
21 York, and I wrote to the Court last week to advise that  
22 I'm here to protect the interests of the United States. I  
23 just wanted to introduce myself.

24          THE COURT: I remember you.

25          MS. LEVY: Thank you very much, your Honor.



1 THE COURT: Now can we go forward.

2 MR. MALDONADO: Yes, your Honor.

3 On our affirmative defense, we would like to  
4 Jeffrey Dyber to the stand, please.

5

6 JEFFREY DYBER,

7 called as a witness, having been first  
8 duly sworn, was examined and testified  
9 as follows:

10

11 THE COURT: Have a seat, and in a loud clear  
12 voice please state your name.

13 THE WITNESS: Jeffrey Dyber.

14 THE COURT: And your title?

15 THE WITNESS: Environmental Engineer II.

16

17 DIRECT EXAMINATION

18 BY MR. MALDONADO:

19 Q. Good morning, Mr. Dyber, and thank you for appearing  
20 here.

21 My name is Kevin Maldonado, and I represent the  
22 defendants in this case.

23 Could you briefly describe your educational  
24 background for the Court?

25 A. I have a Bachelors of Science in chemical

1 engineering.

2 THE COURT: Do you have a CV, please?

3 MR. MALDONADO: No, he's never produced a CV in  
4 this case, your Honor.

5 THE COURT: Do you have one?

6 THE WITNESS: CV? I have a resume, but I don't  
7 have one with me.

8 THE COURT: Is the goal to have him declared an  
9 expert?

10 MR. MALDONADO: No, your Honor.

11 The goal is to show his expertise in  
12 environmental science.

13 THE COURT: Isn't that what I just asked you?  
14 Is the goal to have him declared as an expert?

15 MR. MALDONADO: No, your Honor, he's a fact  
16 witness.

17 BY MR. MALDONADO:

18 Q. Would you briefly describe your educational  
19 background for the Court?

20 A. I have a Bachelor's of Science in chemical  
21 engineering from the State University of New York at  
22 Buffalo, and I have a Master's of public administration  
23 from the University of Albany.

24 Q. Are you currently employed by the New York State  
25 Department of Environmental Conservation?

1 A. Yes.

2 Q. How long have you been employed by the New York State  
3 Department of Environmental Conservation?

4 A. Since 1998, so 17 years.

5 Q. Did you have any involvement in the New Cassel  
6 Industrial Area Superfund Sites?

7 A. Yes.

8 Q. What is your current involvement with the New Cassel  
9 Industrial Area Superfund Sites?

10 A. I am the State contact for operable unit one of the  
11 national priorities list site, the New Cassel/Hicksville  
12 National Priorities List Superfund Site, and I'm also the  
13 project manager for four of the State and actively  
14 hazardous waste disposal sites.

15 Q. Are you the project manager for the Frost Street  
16 parties operable unit one and two site?

17 A. Well, there are three different sites.

18 Yes, I'm the project manager for all three of  
19 those sites.

20 Q. Which are you referring?

21 A. The former Autoline Automotive site, 89 Frost Street  
22 site, and the former Applied Fluidics site.

23 Q. For clarity going forward, can we agree to call those  
24 three sites the Frost Street sites?

25 A. Sure.

1 Q. Are you the project manager for the site formerly  
2 known as DEC operable unit three?

3 A. I was when it existed, and I'm also the project  
4 manager for the utility manufacturing wonder king site.

5 THE COURT: Is that part of the Frost Street?

6 THE WITNESS: No.

7 BY MR. MALDONADO:

8 Q. Is the site known as DEC operable unit three the same  
9 geographical area as the site known as EPA operable unit  
10 one?

11 A. The EPA operable unit one site is -- yes, the  
12 operable unit one of the EPA site is the same geographic  
13 area as the ROU-3 from the New Cassel site.

14 Q. At some point in time the DEC cleanup of operable  
15 unit three was handed off to EPA to clean up; is that  
16 correct?

17 A. Yes.

18 Q. Mr. Dyber, what is your current involvement in the  
19 EPA OU-1 site?

20 A. I'm the State contact for that site.

21 Q. In that capacity do you review documents that are  
22 submitted by the EPA?

23 A. Yes.

24 Q. You comment on documents that are submitted by the  
25 EPA?

1 A. Yes.

2 Q. There came a point in time --

3 MR. MALDONADO: Judge, we agreed on a lot of  
4 exhibits during lunch and they're not moved into evidence  
5 yet but I would like to.

6 THE COURT: Absolutely. If they're on consent,  
7 it's not a problem. But you'll mark them later.

8 Excuse me, could you stop chatting in the back.

9 Thank you.

10 BY MR. MALDONADO:

11 Q. Mr. Dyber, did there come a time a point in time when  
12 you reviewed a document called -- prepared by HDR and  
13 known as the Supplemental Feasibility Study and  
14 Memorandum?

15 A. Yes.

16 Q. What is the purpose of a Supplemental Feasibility  
17 Memorandum with respect to the OU-1 site?

18 MR. MULVIHILL: Objection, your Honor.

19 There's no foundation that he has anything to do  
20 with this document.

21 MR. MALDONADO: He testified he reviews the  
22 documents, participated and comments on the documents and  
23 is the DEC liaison to that part of the site with EPA.

24 THE COURT: That doesn't mean that he actually  
25 has anything to do --

1 MR. MALDONADO: May I approach the witness with  
2 an exhibit that is going to be marked into evidence,  
3 Judge?

4 THE COURT: Of course.

5 MR. MALDONADO: Judge, I have a copy for you as  
6 well.

7 For the record, I have handed the witness a copy  
8 of the July 2013 HDR O'Brien and Gere Supplemental  
9 Feasibility Technical Memorandum for operable unit one.  
10 BY MR. MALDONADO:

11 Q. Sir, have you reviewed this document previously?

12 A. I believe I have, yes.

13 THE COURT: What exhibit is this going to be, 1?

14 MR. MALDONADO: Yes, your Honor, it will be 1.

15 BY MR. MALDONADO:

16 Q. When did you first review this document?

17 A. Well, my memory was that there was a draft document  
18 and a final document and I believe we -- I believe we had  
19 comments on the draft document and I'm not sure if this is  
20 the draft or the final version of the document.

21 Q. I will say to you that -- I will represent to you  
22 this is the final copy of the document.

23 A. Okay.

24 Q. When you submitted your comments to this document,  
25 who did you submit them to?

1 A. The EPA.

2 Q. Those comments were accepted by the EPA?

3 MR. MULVIHILL: Objection, your Honor.

4 THE COURT: Sustained.

5 BY MR. MALDONADO:

6 Q. Mr. Dyber, did you, at any point in time when this  
7 was made final, review this document?

8 A. Yeah, I'm sure I reviewed all versions of the  
9 document.

10 THE COURT: Including the final one?

11 THE WITNESS: Yeah.

12 BY MR. MALDONADO:

13 Q. Did you agree with the conclusions reached in this  
14 document?

15 A. I don't know if we gave a formal --

16 THE COURT: We? Only speak for yourself, sir.

17 THE WITNESS: I'm sorry.

18 A. I'm not sure if I sent a formal approval of the  
19 document, and I can't say that I -- it's a long document.  
20 I can't say that I agree with everything in the document,  
21 but it's possible.

22 Q. Mr. Dyber, I'm going to ask you to now turn to figure  
23 3-2 of that document.

24 A. Yes.

25 Q. First off, Mr. Dyber, that map indicates in the

1 legend 100 parts per billion?

2 THE COURT: What are you looking at?

3 MR. MALDONADO: May I make this simpler, Judge,  
4 and put the blowup of the map in front of you and the  
5 witness?

6 THE COURT: Sure. Aren't they in the exhibit?

7 MR. MALDONADO: They are in the exhibit, but  
8 they're hard to see because of the size.

9 THE COURT: Yes, I know. This is from when this  
10 particular map.

11 MR. MALDONADO: This was drawn in 2013 for the  
12 EPA, your Honor.

13 BY MR. MALDONADO:

14 Q. Is that the same exhibit that's in the same figure  
15 that's in the exhibit before you as exhibit 1 at 3-2?

16 A. It appears to be.

17 Q. What is that a figure of, sir?

18 THE COURT: I can't see it.

19 BY MR. MALDONADO:

20 Q. The question is what is this diagram?

21 A. It's a representation of groundwater contamination  
22 plumes.

23 Q. How many plumes are drawn on that map?

24 A. It appears that there are -- it appears that there  
25 are three to four.



1 Q. What are the three or four plumes labeled as?

2 A. Three of the plumes are the eastern plume, the  
3 central plume, the western plume.

4 THE COURT: What would be the fourth?

5 THE WITNESS: It's not labeled.

6 THE COURT: Is it because -- I can't see it --  
7 is it to the east of the eastern plume? Can you describe  
8 for the record where it is?

9 THE WITNESS: It looks like the groundwater  
10 contamination plume between the eastern and central plume.

11 MR. MALDONADO: Judge, may I ask the witness to  
12 step down and point to the various plumes?

13 THE COURT: He doesn't have to do that.

14 BY MR. MALDONADO:

15 Q. With respect to the eastern plume, what is that plume  
16 delineated down to in terms of concentrations?

17 A. It appears it's delineated to 100 parts per billion.  
18 That's what the lines represent.

19 Q. Mr. Dyber --

20 THE COURT: That's the general contamination,  
21 correct, the way you read this?

22 THE WITNESS: It's based on specific sampling  
23 points, so it's based on the data.

24 THE COURT: Do you have a breakdown of the  
25 particular contamination?

1 THE WITNESS: This particular figure is for  
2 Tetrachloroethylene PCE. There are other figures that  
3 have plumes for different contaminants.

4 THE COURT: I'm talking about this one.

5 THE WITNESS: This is for a specific contaminate.

6 THE COURT: PTE?

7 THE WITNESS: PCE or per chloroethylene, the  
8 stuff they use in dry cleaning.

9 THE COURT: Which was on one of the Frost Street  
10 properties at one time?

11 THE WITNESS: Yes.

12 THE COURT: Go ahead.

13 BY MR. MALDONADO:

14 Q. Mr. Dyber, in addition to the PCE plume, there's also  
15 a drawing of a TCE plume; is that correct, figure 3-3?

16 A. It looks like that's the next one.

17 THE COURT: When you say next, sir, are you  
18 saying it's to the east or the west of this fourth plume  
19 that's between the east and central plume?

20 THE WITNESS: I'm sorry, your Honor.

21 When I said next, I meant the next figure in --  
22 the next figure in the report.

23 THE COURT: I see. Go ahead.

24 BY MR. MALDONADO:

25 Q. That would be figure 3-3, Mr. Dyber; is that correct?

1 A. Yes.

2 Q. This is a drawing of the TCE plumes and there's the  
3 eastern plume, an unnamed plume, a central plume and a  
4 western plume?

5 A. Yes.

6 Q. The caption, the legend on this map with respect to  
7 TCE, says the delineation is down to five parts per  
8 billion; is that correct?

9 A. There are two different lines. There's one type of  
10 line and it's based on the colors delineated to 100 parts  
11 per billion, then there's a different line based on color  
12 that delineates it to five parts per billion.

13 Q. With respect to the PCE plume that's over there, they  
14 also have those different color lines and that would lead  
15 you to believe that that plume map is also delineated down  
16 to five parts per billion as well; is that correct?

17 MR. MULVIHILL: Objection, your Honor.

18 This whole line of questioning is extremely  
19 leading.

20 THE COURT: Sustained.

21 Go ahead.

22 BY MR. MALDONADO:

23 Q. Are the two different types of lines that represent  
24 five parts per billion and 100 parts per billion also on  
25 the PCE map?

1 A. Looking at the legend --

2 THE COURT: Counsel, when you refer to these,  
3 could you, for the sake of the record and myself, say T as  
4 in Thomas or P as in Paul.

5 MR. MALDONADO: Yes, your Honor.

6 A. I'm looking at the legend for figure 3-2, the figure  
7 that's there, and I don't see anything in the legend that  
8 identifies lines for a five part per billion line.

9 Q. Mr. Dyber, I'm asking you, the lines that are drawn  
10 on the PCE map, figure 3-2, are they drawn to five parts  
11 per billion as well?

12 A. I don't -- I only see lines -- I only see -- the  
13 only thing I see are the legend is 100 parts per billion.

14 So if they drew other lines, they didn't seem to  
15 identify them legend for the figure.

16 Q. I will represent to you that Mr. Connors prepared  
17 this map. He's given a deposition on this map and he's  
18 indicated that the legend is wrong, that this is a five  
19 parts per billion map, not 100 parts per billion map.

20 MR. MULVIHILL: Objection, your Honor.

21 THE COURT: Sustained.

22 BY MR. MALDONADO:

23 Q. So, Mr. Dyber, you can't tell, as you sit here today,  
24 whether the light blue lines drawn on the map --

25 THE COURT: Is this the same question in another

1 form?

2 MR. MALDONADO: I'm asking him to look at the  
3 map, not the legend, your Honor, and if he's able to do  
4 that and determine whether or not this is a five part per  
5 billion.

6 THE COURT: So your answer is yes, without  
7 looking at the legend. So what is he looking at now, the  
8 colors?

9 MR. MALDONADO: The colors of the plumes that  
10 are drawn on the map, Judge.

11 THE COURT: That's based on the legend?

12 MR. MALDONADO: No, it's based on the data on  
13 the map.

14 THE COURT: Go ahead.

15 What's the question.

16 BY MR. MALDONADO:

17 Q. Are you able to look at the plumes as drawn on figure  
18 3-2, the PCE map, and determine whether or not that is  
19 delineated down to five parts per billion?

20 A. I wouldn't feel comfortable with that.

21 Q. With respect to the TCE map, is that map delineated  
22 down to five parts per billion?

23 A. Yes.

24 THE COURT: He already testified to that.

25

1 BY MR. MALDONADO:

2 Q. What is the significance of a delineation down to  
3 five parts per billion?

4 A. For TC in particular, that's the New York State  
5 groundwater standard.

6 Q. What does that mean?

7 A. That would mean that --

8 THE COURT: It doesn't exceed an appropriate  
9 standard, would you say that?

10 THE WITNESS: Yes. Yes, your Honor.

11 BY MR. MALDONADO:

12 Q. I'm going to ask you to, with the Court's permission,  
13 step up to this map and point out to the Court where the  
14 eastern plume is and what it is delineated down to in  
15 terms of concentration on that map.

16 (The witness steps down.)

17 A. So, in this particular map, the light blue line, the  
18 light blue line is the five part per billion estimate for  
19 the -- for 150 feet deep is this light blue dash line.

20 Generally when people --

21 THE COURT: There's no question, sir. You  
22 answered the question.

23 THE WITNESS: There are also two other lines.

24 THE COURT: Wait for the question.

25

1 BY MR. MALDONADO:

2 Q. Mr. Dyber, are we in agreement that this eastern  
3 plume as delineated from here comes from the Frost Street  
4 parties properties?

5 A. Yes.

6 Q. And only the Frost Street parties property, correct?

7 A. Yes.

8 Q. At the time this map was included in the draft copy  
9 of the supplemental feasibility study that you reviewed,  
10 did you comment on this map?

11 A. Did I comment on the map?

12 Q. The figure before you, 3-3?

13 A. I honestly don't remember what my comments consisted  
14 of. It's been a while.

15 Q. At the time that you did, you agreed with the  
16 delineation of the TCE plume that's contained on the  
17 figure 3-3 before you at this point?

18 A. Did I agree with it? I don't know if I commented on  
19 it and I don't know what I said. I don't know what I  
20 commented on, if at the time I had any comments on the  
21 figure.

22 Q. As you stand here today, do you have any data that  
23 shows that that figure is not drawn accurately?

24 A. Well, this figure was based on particular data taken  
25 at a particular time.

1           So I assume that HDR did its best to represent  
2           the plumes based on the data set of the individual wells.

3           MR. MALDONADO: I'm done with this figure, your  
4           Honor.

5           Mr. Dyber, thank you, you can go back to the  
6           stand please.

7           (The witness resumes the stand.)

8           BY MR. MALDONADO:

9           Q.   Mr. Dyber, was this supplemental feasibility study  
10           memorandum used to select the remedy that was selected in  
11           the EPA OU-1?

12           MR. MULVIHILL: Objection, no foundation.

13           THE COURT: Sustained.

14           BY MR. MALDONADO:

15           Q.   Mr. Dyber, did you review the EPA OU-1 ROD?

16           A.   Yes.

17           Q.   Did you comment on the EPA OU-1 ROD?

18           A.   I believe we did, or at least the draft -- one of the  
19           earlier drafts.

20           Q.   Did New York State Department of Environmental  
21           Conservation concur in the remedy selected by the EPA OU-1  
22           ROD?

23           A.   Yes.

24           Q.   Do you know, do you have an understanding, how the  
25           remedy was selected in the EPA OU-1 ROD was determined?



1 A. The remedy is selected based on seven criteria that  
2 are used in the feasibility study and in the run.

3 They are the protection of human health and the  
4 environment, compliance with ARARS, which is basically  
5 standards, short-term effectiveness and long-term  
6 effectiveness, implement ability cost.

7 I'm trying to remember all seven of them. So  
8 there was seven criteria they used and then they first put  
9 out a document called --

10 THE COURT: Who is they, sir?

11 THE WITNESS: The EPA put out a document called  
12 a proposed plan, your Honor, and that has a proposed  
13 remedy on it.

14 THE COURT: Based on the seven factors?

15 THE WITNESS: Based on these factors, based on  
16 these evaluation criteria, and then they get public  
17 comment and the final remedy considers the public's  
18 comments on the proposed plan.

19 MR. MALDONADO: Judge, I'm going to approach the  
20 witness with another exhibit.

21 THE COURT: You don't have to keep asking.

22 MR. MALDONADO: It's exhibit 2. It's a copy of  
23 the EPA OU-1 ROD.

24 Q. I ask you to look at that, Mr. Dyber, and identify it  
25 for the record?

1 A. Yes.

2 It's the EPA OU-1 ROD.

3 Q. Mr. Dyber, pursuant to the document before you, the  
4 EPA OU-1 ROD, was there a remedy selected for the EPA OU-1  
5 area?

6 A. Yes.

7 Q. What was that remedy?

8 A. It was a mixture of a few different technologies.

9 It was -- one of the technologies was extraction  
10 and treatment of contaminated groundwater, one of the  
11 technologies was involving a vapor stripping, and one of  
12 the technologies was in-situ chemical oxidation.

13 Q. Is it fair to say, Mr. Dyber, that pursuant to the  
14 EPA OU-1 ROD, three separate treatment technologies were  
15 selected for each of the plumes in that site?

16 A. Yes.

17 THE COURT: Were the ones chosen from the  
18 eastern plume different from the central and the western  
19 and this other fourth unidentified plume?

20 THE WITNESS: For the eastern plume they are  
21 going to do two things; they're going to do groundwater  
22 extraction treatment and in-situ chemical oxidation.

23 For the central plume, they're just going to do  
24 in-well vapor stripping, and for the western plume they're  
25 going to be a combination of in-well vapor stripping and

1 extraction and groundwater extraction and treatment.

2 THE COURT: So both the eastern plume and the  
3 western plume have the groundwater extraction as part of  
4 their remedy?

5 THE WITNESS: Yes, your Honor.

6 MR. MALDONADO: Your Honor, I'm going to ask the  
7 witness to take a look at figure three and I'll put this  
8 up or on the board.

9 THE COURT: I have a question.

10 Have there been prior remediations of this area  
11 employing different techniques?

12 THE WITNESS: The only work that's been done in  
13 this area that can be considered was putting the treatment  
14 on the Bowling Green public water supply.

15 THE COURT: Putting what?

16 THE WITNESS: The State paid for treatment for  
17 the Bowling Green public water supply so that the  
18 residents could continue to get clean water.

19 BY MR. MALDONADO:

20 Q. I'm going to ask you to look at this figure again  
21 three from the EPA OU-1 ROD.

22 THE COURT: Is the record of decision?

23 MR. MALDONADO: Yes.

24 THE COURT: What page?

25 MR. MALDONADO: Figure three.

1 MR. MALDONADO: I'll ask you to step in front of  
2 the diagram and point some things out for me.

3 (The witness steps down.)

4 THE COURT: What page?

5 MR. MALDONADO: There's a reference to figures  
6 in the index and that will tell you the page. It's figure  
7 three.

8 THE COURT: Is that after the table of contents?

9 MR. MALDONADO: Halfway through the document,  
10 your Honor, with the figures.

11 BY MR. MALDONADO:

12 Q. Mr. Dyber, on the figure three before you, it shows  
13 three separate plumes, correct?

14 A. Yes.

15 Q. The eastern plume, the central plume and the western  
16 plume?

17 A. Correct.

18 Q. For the eastern plume, it shows a remediation system  
19 that has three extraction wells, correct?

20 MR. MULVIHILL: Objection, leading.

21 THE COURT: Correct. Stop leading him.

22 A. You're correct, there are three extraction wells.

23 Q. For the central plume, what is the treatment system  
24 selected there?

25 A. That's in-well vapor stripping.

1 Q. To the western plume, what is the treatment system  
2 there?

3 THE COURT: He already testified. He answered  
4 this. But go ahead.

5 BY MR. MALDONADO:

6 Q. These are three independent systems, correct?

7 MR. MULVIHILL: Objection.

8 THE COURT: Sustained.

9 BY MR. MALDONADO:

10 Q. Are the systems independent of one another?

11 A. No, they appear to share the systems for the remedial  
12 element for -- the eastern and central plume appear to  
13 share a treatment building.

14 THE COURT: Which share?

15 THE WITNESS: These two plumes, your Honor.

16 THE COURT: The eastern, the Frost Street plume  
17 and the central?

18 THE WITNESS: Yes, appear to be piped to the  
19 same treatment building.

20 THE COURT: Okay. Go ahead.

21 BY MR. MALDONADO:

22 Q. Turning back to this figure, figure 3-3 from the  
23 supplemental feasibility study, at any point on this  
24 delineation of the plumes is there intersecting plume  
25 lines for the various plumes?

1 A. On this particular figure, no.

2 Q. On this particular figure -- Mr. Dyber, there came a  
3 point in time when an OU-2 ROD was prepared for the Frost  
4 Street properties, correct?

5 MR. MULVIHILL: Objection, your Honor.

6 A. Yes.

7 THE COURT: You are leading him, but it's okay.

8 BY MR. MALDONADO:

9 Q. You are the project manager on the Frost Street  
10 property OU-2 site?

11 A. Yes.

12 Q. Have you reviewed the ROD for that site, the OU-2  
13 ROD?

14 A. I read it.

15 Q. You understand the nature of the contamination at  
16 that site?

17 A. Yes.

18 Q. As a project manager, you would need to understand  
19 the nature of the contamination, correct?

20 A. Yes.

21 Q. The OU-2 ROD delineated the plume of contamination as  
22 flowing from the Frost Street property?

23 A. I guess I would have --

24 THE COURT: You can't guess, sir. Do you know  
25 or you don't know?

1 THE WITNESS: I'm not sure at this point the  
2 exact contents of the ROD.

3 Q. I'm going to put before you what's going to be marked  
4 Exhibit 3.

5 It's a copy of the 2000 operable unit two ROD  
6 for the Frost Street properties, and specifically I'm  
7 going to ask you to look at page 35.

8 THE COURT: Is this the one I have?

9 MR. MALDONADO: I have one for you here, your  
10 Honor.

11 A. Yes, I see the figure.

12 Q. What is the operable unit two ROD?

13 A. The operable unit two ROD is a selection of a remedy  
14 for the groundwater contamination coming from all three of  
15 the Frost Street sites.

16 Q. Before this ROD was prepared, was a remedial  
17 investigation feasibility study done?

18 A. Yes.

19 Q. And the remedy selected in the OU-2 ROD was based  
20 upon a feasibility study done in the RIFS for OU-2?

21 MR. MULVIHILL: Objection, leading.

22 THE COURT: Sustained.

23 BY MR. MALDONADO:

24 Q. Can you describe the process by which the OU-2 ROD  
25 issued?

1 A. Well, similar to the EPA's process that I just  
2 described, we, the department's consultant, did a remedial  
3 investigation and a feasibility study.

4 THE COURT: And the public comment.

5 THE WITNESS: Then we put together a proposed  
6 remedial action plan with the proposed remedy, we  
7 solicited public comments, and then we sought a final  
8 remedy in the record of decision.

9 BY MR. MALDONADO:

10 Q. As part of the RIFS process, a plume was identified  
11 coming off of the Frost Street properties; is that an  
12 accurate statement?

13 A. Yes.

14 Q. On page 35 of the OU-2 ROD, is a plume identified  
15 originating from the Frost Street property?

16 A. Yeah, that's the plume identifying the contamination  
17 from the deeper wells that they sampled.

18 Q. Is it a fair statement that as part of the RIFS  
19 process, one of the goals is to identify where the  
20 contamination is?

21 A. Yes.

22 Q. That's called preparing a conceptual site model?

23 A. There's more to a conceptual site model than that.

24 Q. Is it fair to say that before you select a remedy,  
25 you need to know where the contamination is?



1 MR. MULVIHILL: Objection, leading.

2 THE COURT: Sustained.

3 BY MR. MALDONADO:

4 Q. On page 35 of the OU-2 ROD, there's a large area of  
5 contamination identified.

6 What is that?

7 THE COURT: Are you talking about the whole --  
8 when you say the large area, you mean the entirety of it?

9 MR. MALDONADO: Let me break it down for you,  
10 your Honor.

11 This is a very important point.

12 THE COURT: I hope every point you make is  
13 important.

14 BY MR. MALDONADO:

15 Q. Can you identify on this diagram where the Frost  
16 Street properties are?

17 A. Okay.

18 The former Autoline Automotive site is this  
19 property, the 89 Frost Street.

20 THE COURT: I see it. It's labeled former  
21 Autoline Automotive.

22 The next one is 89 Frost Street, which is  
23 marked, and the next one is Applied Fluidics.

24 Are those the ones you're referring to?

25 Okay. Go ahead.

1 BY MR. MALDONADO:

2 Q. The solid lines and the dotted lines drawn on this  
3 map, what do they represent?

4 A. They represent based on the data for the individual  
5 wells an approximation of equal concentration. In this  
6 case, the total volatile organic compounds.

7 Q. Can you state that simply?

8 A. This is basically the area of the contamination  
9 that's been identified in the OU-2 ROD that originates  
10 from the Frost Street site.

11 THE COURT: Sustained.

12 (Continued on next page.)  
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1 BY MR. MALDONADO: (Cont'd.)

2 Q And the process of preparing the OU 2-ROD was a  
3 determination made by the Department of Environmental  
4 Conservation where the area of contamination on this plume  
5 came from?

6 A I'm sorry. I -- can you repeat the question, please?  
7 I guess I didn't understand it.

8 Q That's fine. I'll restate it.

9 When the OU-2 ROD was prepared, was a  
10 determination made as to where the contamination in this  
11 plume area came from?

12 THE COURT: Emanated really.

13 A It was determined that it came from the Frost Street  
14 site.

15 Q When that determination was made as to where this  
16 plume is, how was that determination made?

17 A Well, I didn't write the OU-2 ROD, but generally as I  
18 was talking about, my predecessor project manager and the  
19 consultant that worked for us did the remedial  
20 investigation -- let me back up.

21 First, other people in the department determined  
22 that the sites should be listed on our registry of an  
23 active registry disposal site and they did that by  
24 determining there was disposal of hazardous waste on the  
25 site, that each of the sites was a significant threat to

1 human health in the environment.

2 Then once the sites were listed a remediation  
3 investigation was conducted to determine the nature and  
4 extent of contamination from the sites.

5 Q As part of the remediation investigation, were wells  
6 and hybrid punch data collected from the site?

7 A Yes.

8 Q And where were the monitoring wells installed? Point  
9 it out for the Court, please?

10 A There were several on this figure. There's on this  
11 figure we have all these different wells that were  
12 installed as part of the investigation --

13 THE COURT: Those wells are shown how on the map  
14 because we need that for the record.

15 Q Let's start on Old Country Road. Three monitoring  
16 wells on Old Country Road.

17 THE COURT: Is this FSMW, are those the wells,  
18 Mr. Dyber?

19 THE WITNESS: Yes, your Honor.

20 Q What were the results at the time this diagram was  
21 prepared from the Frost Street Monitoring Well 7?

22 A Well, 7-B, the concentration was four parts per  
23 billion of total volatile organic compound.

24 Q And that is under MCLs. Is that under MCL,  
25 Mr. Dyber?

1 A Remember, this is total volatile organic compounds,  
2 so the standards are for individual volatile organic  
3 compounds.

4 Most of the compounds that are associated with  
5 the Frost Street sites have standards of five parts per  
6 billion.

7 Q Is the total VCL number 4 under MCLs?

8 A There is no such things, at least for the state, as a  
9 standard for total VOCs. It's individual.

10 Q Was any individual VOC identified in Frost Street  
11 Monitoring Well 7-B in exceedance of the MCL?

12 THE COURT: 7-C?

13 MR. MALDONADO: B, your Honor.

14 A I can't tell from this figure and -- so I would have  
15 to look at the data for that individual monitoring well to  
16 be sure.

17 Q Mr. Dyber, does this figure 4, number 4, represent  
18 the total VOCs?

19 A Yes.

20 Q So based upon that, isn't it fair to assume that no  
21 individual VOC exceeded 4?

22 A You are correct.

23 Q So can you determine based on that number whether or  
24 not there was an exceedance of MCLs?

25 A Well, I'll give you an example. Vinyl chloride which

1 is a breakdown product of all of the compounds that we  
2 found at the Frost Street sites, has a standard of, I  
3 believe, two parts per billion.

4 So, for example, and I'm not saying this  
5 happened, but, for example, if there were three parts per  
6 billion in vinyl chloride in that well it would exceed the  
7 standards. I can't tell without seeing the breakdown of  
8 the breakdown of the VOCs in this well.

9 Q Let's focus on this well. If I gave you a complete  
10 set of all the data taken on that well, you would be able  
11 to tell when and if PCE or TCE ever exceeded MCLs at that  
12 site?

13 A You mean at that well?

14 Q Frost Street Monitoring Well 7-B.

15 A Yes, if you gave me all the data. Yes.

16 THE COURT: Have you seen this data before, sir?  
17 Have you seen what counsel is handing you before?

18 THE WITNESS: I'm fairly confident I have, yes.

19 Q Handing to the witness a report generated for the New  
20 York State Department of Environmental Conservation. The  
21 most recent data report summarizes all the data ever  
22 collected from that well and all the wells in the area.

23 THE COURT: As of when?

24 MR. MALDONADO: As of 2015, last quarter.

25 MR. MULVIHILL: Your Honor, I object to this

1 document.

2 THE COURT: Because?

3 MR. MULVIHILL: Not listed on defendant's  
4 exhibit list on the joint pretrial order and on Thursday  
5 afternoon, your Honor, I received a CD from defendants'  
6 counsel that included 1200 pages of documents that was  
7 titled supplemental production. I don't know if this was  
8 a part of it, but considering this was from March of 2016  
9 -- actually I don't think that was included.

10 I think most of the documents were of the 2014  
11 to 2015 time frame, your Honor.

12 Like I said, I don't know if this document has  
13 been produced in this litigation. If it has it was  
14 produced last week, and as I mentioned before it is not  
15 listed on the joint pretrial order.

16 THE COURT: When was it created?

17 MR. MULVIHILL: It says March 2016. So last  
18 month.

19 MR. MALDONADO: Judge, the way it works, every  
20 month or every quarter a report is issued that summarizes  
21 all data. When we did the disclosure last, these reports  
22 for quarters were included.

23 The production I made last week was to bring the  
24 production current from when the last production was made  
25 to the present time. These documents are submitted in DEC

1 every quarter. These are in the DEC reports, they have  
2 them. As a matter of fact they should have produced them  
3 back to me as a disclosure and it wasn't done.

4 These are documents created after the last  
5 disclosure and represent the most current recent  
6 accounting of data.

7 MR. MULVIHILL: Your Honor, they should not have  
8 been produced back by the state. These relate to Operable  
9 Unit 2 of the Frost Street site which does not operable  
10 Unit 3. The costs that are at issue in this case relate,  
11 has been well documented, relate to Operable Unit 3. So  
12 the state that this should have been produced back to us,  
13 in this particular one, was not done.

14 MR. MALDONADO: Judge, the determination where  
15 the contamination entered Operable 3 is a critical point.  
16 If you don't know where it came in you can't track it.  
17 We're establishing where it came in and why it is where it  
18 is.

19 THE COURT: Go ahead.

20 MR. MALDONADO: Judge, I gave you my copy of the  
21 exhibit because the areas that he's going to be looking at  
22 are highlighted and marked so it's easier to find.

23 Q I'll ask you to refer to the data tables in that  
24 exhibit. Find the data for well 7-B.

25 A Okay.



1 MR. MULVIHILL: Your Honor, I would like to  
2 renew my objection to this question.

3 THE COURT: Overruled.

4 What are you looking at?

5 MR. MALDONADO: There's data tables in there  
6 that contains the data from 7-B. One goes from 2006 to  
7 2015, the other place goes from 1998 to 2006.

8 THE COURT: Which one are you looking at now.

9 Q Mr. Dyber, take a look at the data relating to 1998  
10 through 2006 for Monitoring Well 7-B.

11 Do you have the data?

12 A So I'm looking now at table 3. This has some of the  
13 data -- some of the data for Monitoring Well 7-B and I'm  
14 looking at the four rounds of data that they took. I  
15 don't see any exceedances of groundwater standards. I see  
16 one detection of TC --

17 Q For TCA, there has not been an exceedance at that  
18 point for monitoring street well 7-B as in boy?

19 A Correct.

20 THE COURT: When?

21 MR. MALDONADO: Sorry, your Honor?

22 THE COURT: When, sir.

23 A There were four rounds of sampling on this table,  
24 your Honor, 1998, 2000, 2003 and 2005. And of those  
25 four -- and 2005 there was one part per billion of TCE

1 which is less than the five parts per billion standard --

2 THE COURT: I understand.

3 Q With respect to data for the time period 1998 to  
4 2005, is that in the table in that exhibit?

5 A I'd have to look the other tables and see what the  
6 other data is.

7 Q Can you look at table 3 of the exhibit before you?

8 A That's the one I'm looking at now.

9 MR. MALDONADO: Judge, may I borrow my exhibit  
10 back, please?

11 THE COURT: Sure.

12 Tell me when it is an appropriate time to break.

13 MR. MALDONADO: Right after I get this table in,  
14 if I could.

15 THE COURT: If you could.

16 MR. MALDONADO: If I could.

17 Q Table 3, sir, what time period is that for?

18 A The one we're talking about.

19 Q '98 through 2005. Table 6.

20 What period is that?

21 A Going to table 6, for Monitoring Well 7-B, it looks  
22 like it has data from August 2006 to October 2015.

23 THE COURT: They are not '98.

24 THE WITNESS: The two time periods don't appear  
25 to overlap, your Honor.

1 THE COURT: They do appear to overlap?

2 THE WITNESS: No.

3 Q So this table summarizes data from 2006 to 2015. The  
4 prior table summarizes data from 1998 to 2005; is that  
5 correct?

6 A Yes.

7 Q They summarize in two different places one for the  
8 new data, one for the old data.

9 A Yes.

10 Q What does that data shows for concentrations of PCE  
11 at Frost Street Monitoring Well 7-B as in boy?

12 A It looks like over that time period the highest  
13 concentration of PCE was 2.3 parts per billion. Although  
14 that sample qualifies -- let's see. One was J which was  
15 generally -- there is no key. The J is generally an  
16 estimated concentration.

17 There's also a B qualifier which indicates that  
18 it was found in the blank, in the quality control sample  
19 as well.

20 THE COURT: What does "blank" mean?

21 THE WITNESS: Blank would be -- there are  
22 different types of blanks.

23 One blank is when you bring -- you just bring a  
24 bottle of water with you to the sampling event, and then  
25 you bring it back and --

1 THE COURT: We don't know what the blank  
2 represents in this particular instance.

3 THE WITNESS: I'm not sure which type of blank  
4 it is.

5 THE COURT: So you can't testify. Go ahead.

6 Q Mr. Dyber, based on your review of both tables 3 and  
7 6, have you found an exceedance of PCE or TCE from the  
8 samples taken from Frost Street Monitoring Well 7-B at any  
9 time?

10 A Let's see. Let's look at TCE.

11 I don't see exceedance of standard -- the data  
12 I've looked at, I don't see any exceedance of standard for  
13 either of those compounds.

14 Q So based upon that data, sir, would you consider  
15 Frost Street Monitoring Well 7-B a good indicator that the  
16 contamination found in this plume hasn't migrated to the  
17 west of that plume area?

18 MR. MULVIHILL: Objection, your Honor.

19 THE COURT: Sustained.

20 MR. MALDONADO: I think this is a good place to  
21 take a break, your Honor.

22 THE COURT: We'll take five or ten minutes.

23 (Whereupon, a recess was taken.)

24 MR. MALDONADO: We'll have you focusing now on  
25 cross street well 6-B.

1 A Yes.

2 Q Where is that monitoring well located?

3 A Located just north of Old Country Road.

4 Q Is it also located in the middle of the plume that  
5 has been drawn on the figure that is before you as figure  
6 9?

7 A The middle, from east to west. Yes, the middle.

8 Q And what are the contaminants found in cross street  
9 monitoring well 6-B?

10 A From the figure, this was 240 parts per billion of  
11 total Volatile Organic Compounds.

12 Q Is that figure well over MCLs?

13 A Again, the ground water standards are for the  
14 individual contaminants.

15 Q There is another well located on Old Country Road  
16 called Frost Street Monitoring Well 5.

17 A Yes.

18 Q Which side of the OU-2 contaminant plume is that  
19 located on?

20 THE COURT: That is Well --

21 MR. MALDONADO: Frost Street Monitoring Well 5-B  
22 as in boy, your Honor.

23 THE COURT: Go ahead.

24 A It appears to be on the east side of the represented  
25 plume.

1 Q Mr. Dyber, in addition to the wells drawn in that  
2 particular dial, were hydro punch data collected with  
3 respect to the operations that delineated the OU-2 plume?

4 A There was hydro punch data collected, yes.

5 Q What is a hydro punch?

6 A A hydro punch is they use a drill and they go down to  
7 a depth and it is basically a temporary sampling point, as  
8 opposed to a monitoring well where you can reuse the well  
9 in the future.

10 The monitoring well stays there. The hydro  
11 punch stays just for that one sampling event.

12 Q With the hydro punch technique, are you able to take  
13 samples from various depths as that hydro punch goes down?

14 A Yes.

15 Q Was that done with respect to Frost Street HP-07?

16 A From the figure, yes, it appears that that that was  
17 done.

18 Q Was Frost Street Hydro Punch 7 done in the same  
19 location as monitoring well Frost Street Monitoring Well  
20 7-B?

21 A Can I see both figures? It appears to be in  
22 approximately the same location.

23 Q What does the hydro punch data taken at the Frost  
24 Street Hydro Punch 7 location show in terms of levels of  
25 contamination?

1 A It appears -- the figures that you are showing me has  
2 PC and TC concentrations and I guess there is one toluene  
3 concentration for that hydro punch. I just want to look  
4 at the key real quick.

5 It shows contaminant concentrations for those  
6 compounds, for those chemicals.

7 Q Were those chemical contaminant levels under five  
8 parts per billion for every level sampled in the Frost  
9 Street hydro punch?

10 A Looks like the only one that exceeded five parts per  
11 billion was toluene.

12 Q Is toluene a contaminant of concern in this case?

13 A No, it hasn't been something that we've been  
14 concerned about.

15 Q For Frost Street hydro punch 5, where was that hydro  
16 punch located?

17 A Five was at the eastern -- the easternmost of the  
18 three points that are on that figure.

19 Q With respect to Frost Street hydro punch 6, where was  
20 that located?

21 A Of the three points on figure 7, the middle one. It  
22 is between 5 and 7.

23 Q And what were the results of Frost Street hydro punch  
24 6?

25 A Let's see.

1 THE COURT: Five percent exceeds the standard,  
2 correct?

3 THE WITNESS: I'm not sure what the standard is  
4 for toluene.

5 THE COURT: The toluene is not part of this  
6 case?

7 THE WITNESS: No.

8 THE COURT: So, please. Let's talk about what  
9 we have to decide, what I have to decide.

10 Q At this point forward, can we focus on TCE and PCE  
11 unless I direct you otherwise?

12 A Yes.

13 Q With respect to Frost Street hydro punch 6, was  
14 positive results found for PCE and/or TCE?

15 A Yes, at several depths.

16 Q Based upon the hydro punch data at Frost Street hydro  
17 punch 7, 6 and 5, and monitoring well data Frost Street  
18 Monitoring Well 7, 6 and 5, was the width of the Frost  
19 Street plume delineated at Old Country Road?

20 MR. MULVIHILL: Objection, your Honor. This  
21 calls --

22 THE COURT: Objection as to form.

23 Q At any point during the Operable Unit 2 investigation  
24 prior to the issuance of the ROD, was the width of the  
25 Frost Street plume at Old Country Road delineated?



1 A Can we go back to the other figure?

2 MR. MALDONADO: Let the record show the witness  
3 is looking at figure 7.

4 A I'm just looking at figure 7.

5 It appears that there is PCE contamination in 5  
6 at 95 feet deep, 70 parts per billion, so it exceeds the  
7 standard.

8 Also at 85 feet there was 10.8 parts per billion  
9 which also exceeds the standard. So I wouldn't be able to  
10 say based on this data that the plumes delineated to the  
11 east --

12 Q So let's focus on the west.

13 Based on the data before you, would you be able  
14 to say the plume is delineated to the west?

15 A Based on this particular data --

16 THE COURT: Looking at exhibit what?

17 THE WITNESS: Based on figure 7, figure 9, and  
18 we're limiting ourself to TC and PC, we don't have any  
19 exceedances of standards in any of the data in these two  
20 figures.

21 Q And we went through Exhibit 4 which showed that for  
22 Frost Street Monitoring Well 7-B there has never been an  
23 exceedance for TCE or PCE?

24 A The data in the report there weren't any exceedances  
25 in 7-B.

1 Q I will ask you --

2 MR. MALDONADO: If I could have him approach the  
3 exhibit in on the easel and that is from the supplemental  
4 feasibility study dated July 2013, it's figure 2.

5 I'll ask you, sir, to draw a few things on this  
6 map for me.

7 A Okay.

8 Q Could you draw an X where Frost Street Monitoring  
9 Well 7-B, as in boy, is on that map?

10 A I could certainly try. Let's try to figure this out.

11 Q Mr. --

12 THE COURT: You asked him a question, sir.

13 MR. MALDONADO: I'm sorry, your Honor.

14 THE COURT: Just answer the question. Can you  
15 do that?

16 THE WITNESS: I'm trying, but I don't think I  
17 can with these two particular maps.

18 THE COURT: Go ahead.

19 Q Mr. Dyber, do you see on figure 9 from the OU-2 ROD  
20 where it shows from Frost Street Monitoring Well 7 is  
21 located?

22 A Yes.

23 Q Do you see this little structure, this little square  
24 that is in the corner there?

25 MR. MULVIHILL: Objection. He's leading the

1 witness, your Honor.

2 THE COURT: Sustained.

3 Q Based upon the location of this square on page 35 of  
4 the 0U-2 ROD, can you identified that location on figure 2  
5 from the 2013 FS?

6 A I don't I can. I'm having trouble. I'm sorry.

7 THE COURT: Okay.

8 Q Showing you what is Frost Street D-2 from the HDR  
9 2013 TDI. Are you able to do that on that map, sir, that  
10 is, identify the location of 7-B.

11 A It looks --

12 THE COURT: You can't engage in the conversation  
13 with the lawyer. Just answer. Can you do that? Can you  
14 answer the question positively or negatively, based on  
15 what you have in front of you.

16 A If they are all property lines and these are property  
17 lines (indicating) then I think I can. But --

18 THE COURT: Sir, can you or can't you?

19 THE WITNESS: I don't want to be sure of  
20 something that I'm not completely sure of.

21 THE COURT: Okay.

22 THE WITNESS: I'm sorry if I'm difficult.

23 THE COURT: Please don't be sorry. Actually  
24 your response is you can't answer definitively, you can't.  
25 There's nothing to be sorry about.

1 THE WITNESS: Okay.

2 MR. MALDONADO: Your Honor, I'll put before the  
3 witness the March 10th -- excuse me, the December 11th,  
4 HDR predesign investigation report and that will be  
5 Exhibit 5.

6 THE COURT: What year, sir?

7 MR. MALDONADO: 2011, your Honor, December of  
8 2011.

9 Q Mr. Dyber, I will show you what has been marked sheet  
10 11 from the report I just referenced. Can you point to me  
11 the location of Frost Street Monitoring Well 7-B on that  
12 diagram?

13 A It sits over there.

14 Q It's labeled on that diagram.

15 A Yes.

16 Q Now looking at sheet 11, are you able to determine  
17 where on figure 3-2 Frost Street Monitoring Well 7-B is  
18 located?

19 A Yes.

20 Q Would you please mark that on the diagram for me?

21 A Okay.

22 Q Are you able to mark on sheet 3-2, the location of  
23 Frost Street monitoring well 5-B?

24 A 5-B. I'm sorry, I'm not certain.

25 Q With respect to where the western edge of the plume

1 contour from figure 9 from the OU-2 ROD is located, can  
2 you place a mark on the map where that line comes into the  
3 OU-3 area?

4 A Okay. Let's see, can I do that? You want to know  
5 where this --

6 THE COURT: No. No. No.

7 THE WITNESS: Can you repeat the question? I'm  
8 sorry.

9 THE COURT: No, if you want something read back,  
10 ask me.

11 Q Mr. Dyber, on figure 9 from the OU-2 ROD there's an  
12 area where the western edge delineated to the  
13 contamination crosses Old Country Road; is that correct?

14 A Yes.

15 MR. MULVIHILL: Objection, leading.

16 THE COURT: You are leading. Go ahead.

17 A There is -- yeah, there's a location where that line  
18 crosses Old Country Road.

19 Q Can you mark that location on sheet 3-2 from the HDR  
20 O'Brien Gear Feasibility Study?

21 A I don't think I can because these maps are totally  
22 different scales.

23 Q Is it to the east or west of the point on the map  
24 that you designated the location of the Frost Street  
25 Monitoring Well 7-B?

1 A The line on this map is to the east of Monitoring  
2 Well 7-B.

3 Q All right. Thank you. I'm done with the exhibit,  
4 your Honor.

5 Mr. Dyber, you can go back to the stand, please.

6 Q Mr. Dyber, what is your role in the DEC Operable Unit  
7 3 project?

8 A I'm the state contact -- wait. My role is done  
9 because there is no more Operable Unit 3.

10 Q When there was an Operable Unit 3, what was your  
11 goal?

12 A I was project manager for a period of time.

13 Q How long were you project manager?

14 A It was a number of years and spanned the predesign  
15 work --

16 THE COURT: Can you give us a year?

17 THE WITNESS: Let's see. It was after the  
18 record of decision which was 2003, and it was up to the  
19 point where the EPA listed the site on the MPL which was a  
20 few years ago. So like five or six years.

21 THE COURT: From 2003 to 2008 generally, or 2004  
22 to 2009?

23 THE WITNESS: Probably around, very roughly,  
24 around 2005 to whenever the EPA listed as, which was  
25 probably three or four years ago.

1 THE COURT: Okay. Go ahead.

2 Q In your role as project manager, did you review the  
3 DEC OU-3 ROD?

4 A I read it.

5 Q Were you familiar with it at the time?

6 A Yes, I was familiar with it.

7 Q Did you read the 2000 RI report for OU-3 prepared by  
8 LMS?

9 A At some point, I did, yes.

10 Q When did you review the LMS RI report?

11 A That was probable years ago.

12 Q Does the 2000 LMS, RI report have a purpose?

13 A It was to assist us in selecting the remedy for OU-3.

14 Q Did it summarize all available data utilized in the  
15 selection of the remedy as it existed in 2000?

16 A No, I don't know -- I'm not sure because -- I'm not  
17 sure if additional data was collected between the RIFS  
18 date and the ROD. So I'm not completely sure of that.

19 Q I will put before you a copy of the DEC OU-3 ROD.  
20 That will be marked as Exhibit 6.

21 Can you tell by looking at that ROD, if any  
22 additional data was checked between 2000 when the RI  
23 report was prepared and the issuance of the ROD in 2003?

24 A I have to take a look.

25 It looks like -- I'm reading in the ROD. After

1 the completion of the RI report in 2000, the Bowling Green  
2 early warning monitoring wells continue to be monitored on  
3 a quarterly basis. In addition, each groundwater  
4 monitoring well (one well quadruplet and two wells  
5 cuplets) installed to the southwest of the Bowling Green  
6 production wells in October 2001, and an additional  
7 300-foot deep monitoring well was installed in July of  
8 2002.

9 These wells are also sampled on a quarterly  
10 basis. It appears that additional data was collected  
11 after the RI report.

12 Q Where were those -- the additional data collected  
13 from. What locations?

14 A Okay. It says, well, there were early warning  
15 monitoring wells for the Bowling Green Public Water  
16 Supply. There's a figure that shows the locations, figure  
17 3 in this record of decision, it says, shows the locations  
18 of these wells.

19 Q I will put before you a copy of the 2000,  
20 September 2000 remedial investigation feasibility study  
21 report prepared by LMS, and I believe we are up to  
22 Exhibit 7 --

23 THE COURT: And what is the question?

24 Q -- Does that report contain figures showing the  
25 sample locations that were conducted prior to the issuance



1 of the 2000 FS report?

2 A Yeah. Well, the FS report is part of this.

3 Q Specifically, sir, I'll refer you to figures 3-4, 3-5  
4 and 3-6, and ask you what they are?

5 THE COURT: First do 3-4. We'll do them  
6 individually.

7 A I see in this report, I see figure 3-7, but the  
8 previous figures are cut off. They are not -- looks like  
9 they were copied --

10 THE COURT: Tell us what the first one is.  
11 There was an inquiry about a specific entry. Can you  
12 answer what it is or not?

13 THE WITNESS: Well, in this copy of the RIFS  
14 report, there appear to be no figures that are labeled  
15 3-4, 3-5 and 3-6.

16 THE COURT: Well, then I guess you can't  
17 identify what they are. Would that be correct?

18 THE WITNESS: Yes.

19 THE COURT: Okay.

20 Q Could I see your exhibit and tell us what is going on  
21 here?

22 A Sure. This is 3-7. And three figures are cut off.

23 MR. MALDONADO: There's a copy, your Honor,  
24 but --

25 THE COURT: That may be, but has it come in

1 evidence?

2 MR. MALDONADO: The correct copy will, yes.

3 THE COURT: The question is what does  
4 Exhibit 3-5 represent, if you know?

5 THE WITNESS: Assuming this was the 3-5 --

6 THE COURT: It says figure 3-5.

7 THE WITNESS: From this particular report, it  
8 looks like a map of monitoring wells that were sampled in  
9 August of, August of 1999. It shows the locations of the  
10 monitoring wells and their depths. It doesn't show  
11 screen. So you would say, for example, a well has a  
12 screen from 60 feet to 70 feet deep. This just provides  
13 one depth.

14 THE COURT: In which plume are these monitoring  
15 wells? Where are they in the general scheme of the entire  
16 property?

17 MR. MALDONADO: That's where I was going, your  
18 Honor. If you want me to go there now, I can.

19 THE COURT: Yes.

20 THE WITNESS: The wells appear throughout the  
21 New Cassel industrial area --

22 THE COURT: The entire area?

23 THE WITNESS: And south of the New Cassel  
24 industrial area, there are a number of wells.

25 THE COURT: So they take into account all of the

1 plumes that have been identified here, correct?

2 A I'm not sure. It seems to be. I mean looking at it  
3 casually --

4 THE COURT: Look at it seriously, not casually.

5 A Looking at the figures, there doesn't seem to be a  
6 lot of wells characterized in the eastern plume.

7 THE COURT: Only in the central and the western?

8 THE WITNESS: Seems like there are more of  
9 those.

10 THE COURT: Okay.

11 Q Mr. Dyber, I'll show you these figures blown up. To  
12 the judge's point, we have a general understanding where  
13 the eastern plume has been delineated in the sheet before  
14 the judge in 3-2.

15 Has, according to this sheet, as part of the RI,  
16 has any single well been drilled in the eastern area where  
17 the eastern plume is located?

18 A Can I see that figure?

19 THE COURT: Yes, this is not a game. Yes, of  
20 course. Get up and look.

21 MR. MALDONADO: Your Honor, do you want him to  
22 come up and look at this figure?

23 THE COURT: Yes. If you can say?

24 THE WITNESS: This is that cul-de-sac and this  
25 is that cul-de-sac. And I'm looking at, looks like this

1 well, this one well --

2 THE COURT: Sir, if I can identify by name for  
3 the record?

4 THE WITNESS: Yes, it looks like M-10329 appears  
5 to be within this depiction of the plume.

6 THE COURT: Of the eastern plume?

7 THE WITNESS: Eastern.

8 THE COURT: The northern part of it, sir?

9 THE WITNESS: Yes, by Old Country Road.

10 THE COURT: Above Old Country Road?

11 THE WITNESS: No, it's south of Old Country  
12 Road. I'm sorry, right near Old Country Road.

13 THE COURT: Okay.

14 THE WITNESS: Let's see. I'll see where this  
15 one is. Okay. I'm trying to get a sense where each one  
16 is here.

17 THE COURT: Take your time.

18 THE WITNESS: It appears only one well on this  
19 particular map is within the depiction of the eastern  
20 plume on the figure 3-2 here, that I can see.

21 Q Which well is that, Mr. Dyber?

22 A M-10329.

23 Q Could you please indicate on sheet 3-2 with the  
24 marker where that well is located?

25 A That's at the entrance to the cul-de-sac. So it's

1 right around there (indicating.)

2 Q Other than that one sampling point, are there any  
3 other sampling points that were taken within the eastern  
4 plume area at this time?

5 A Well, there are none on that sheet.

6 Q That sheet --

7 A That figure 3-4.

8 Q Let's go to figure 3-5.

9 A Okay. Looking at 3-5.

10 Q Is there any sampling point on figure 3-5 located in  
11 the delineated eastern plume as taken in 2000?

12 A It looks like that same location on 3-5 was --

13 THE COURT: No additional.

14 A -- No additional that I can see that are in --

15 THE COURT: All right.

16 THE WITNESS: -- That are in, within this  
17 particular depiction.

18 Q I'll now show you figure 3-6 from the RI report of  
19 2000, and ask you if there's any well points located in  
20 the delineated plume as it appears on 3-2?

21 A Okay.

22 In figure 3.6, you have two of those wells that  
23 were sampled for the Frost Street OU-2. You had the FSWM  
24 7-A, you have the FSMW 6-A, and they are within -- because  
25 this, the plume depiction on the right terminates at Old

1 Country Road, so it doesn't go north of Old Country Road,  
2 and these two points are north of Old Country Road.

3 THE COURT: You can't put them on the other --

4 THE WITNESS: Well, I already put 7-B on this  
5 figure.

6 THE COURT: Because they are not because of the  
7 area on this particular exhibit where you are making your  
8 mark?

9 THE WITNESS: Well, 7-A and 7-B, if you extended  
10 these lines, would be within the plume. Let's see if  
11 there are any others.

12 Those seem to be all the ones that are in the  
13 representation of the eastern plumes that are on in  
14 figure, on figure 3-2.

15 (Continued.)

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1 THE COURT: Okay.

2 BY MR. MALDONADO:

3 Q. You also referenced in reviewing the DEC OU 3 ROD  
4 there were certain data points taken that aren't  
5 referenced on here after the 2000 report was prepared.

6 Do you recall that testimony?

7 A. Well, I said that there were -- there was data taken  
8 after the RI was completed, the remedial investigation was  
9 completed.

10 Q. And the question for you, sir, is, are any of those  
11 additional data points that were taken between the  
12 preparation of the 2000 report and the preparation of the  
13 2003 ROD, within the eastern plume area?

14 MR. MULVIHILL: Objection.

15 THE COURT: Basis?

16 MR. MULVIHILL: The eastern plume as depicted on  
17 the HDR figure 3-3.

18 THE COURT: With that stated, can you answer the  
19 question?

20 THE WITNESS: I don't know.

21 THE COURT: Okay.

22 BY MR. MALDONADO:

23 Q. What were the data points that you read from the  
24 EPA OU 3 RODs that were installed after the preparation of  
25 the 2000 report, but before the issuance of the 2003 ROD?

1 A. May I read the ROD.

2 (There was a pause in the proceedings.)

3 A. After completion of the report in September of 2000,  
4 the Bowling Green early warned monitoring wells have  
5 continued to be monitored on a quarterly basis.

6 So you have the two sets of Bowling Green early  
7 warning monitoring wells, this set and that set, the EW 1  
8 B and 1 C and EW 2 B and 2 C. It says in addition --

9 THE COURT: Sir, there is a question.

10 You want to repeat the question? You don't have  
11 to read out loud where you are getting your answer from,  
12 just if you can answer the question.

13 MR. MALDONADO: Let me restate it, your Honor.

14 THE COURT: Go ahead.

15 BY MR. MALDONADO:

16 Q. I'll restate the question, Mr. Dyber.

17 Between 2000, when the RI report was prepared,  
18 and 2003, when the ROD was issued, additional sampling was  
19 done per your testimony.

20 Are any of those sampling points located within  
21 the eastern plume as depicted on figure 3-2 before you.

22 A. Let me look at that.

23 (There was a pause in the proceedings.)

24 A. From the ROD it looks like none of those wells were  
25 within this depiction.



1 THE COURT: Within the eastern plume, is that  
2 what you are saying?

3 THE WITNESS: Within that depiction of the  
4 eastern plume.

5 BY MR. MALDONADO:

6 Q. Mr. Dyber, what was the sampling of the one point  
7 that was within the eastern plume that you identified so  
8 far that being N 10329?

9 A. It says on the figure 57 feet.

10 Q. Based upon the Frost Street hydropunch data seven,  
11 and Frost Street monitoring well 7 B data, would you  
12 expect to find contamination at a depth of 59 feet at the  
13 location of this monitoring well?

14 MR. MULVIHILL: Objection, calls for expert --

15 THE COURT: Sustained as to what he would  
16 expect.

17 BY MR. MALDONADO:

18 Q. Mr. Dyber, in Frost Street hydropunch 7, what was the  
19 level of contamination identified at 60 feet?

20 A. There was 0.51 parts per billion of PCE.

21 Q. .5, a half of one?

22 A. Yes.

23 MR. MALDONADO: That's all for the exhibit, your  
24 Honor.

25 (Witness resumes the stand.)

1 BY MR. MALDONADO:

2 Q. After the data was collected in 2000, as identified  
3 in the RI report, and the subsequent investigations were  
4 conducted, did there come a point in time where the  
5 department made an effort to delineate Frost Street plume  
6 or the eastern plume for purposes of the OU 3 ROD?

7 A. Well, as far as I could see, the data that -- the  
8 data that I described was what was used to write the OU 3  
9 ROD.

10 Q. When the OU 3 ROD was written, was an effort made to  
11 delineate the groundwater flow direction in the area of  
12 the Frost Street plume as it crossed Old Country Road?

13 A. I'm not sure.

14 Keep in mind I am not the author -- I didn't  
15 become involved with this until after the ROD was written.

16 Q. Fair enough.

17 I ask you, sir, to take a look at figure 6-1 of  
18 the 2000 RI report.

19 A. That's not it.

20 Q. Figure.

21 A. I'm looking for it.

22 (There was a pause in the proceedings.)

23 A. Okay.

24 Yes, I see it.

25 Q. What is that figure, sir?

1 A. That shows groundwater or elevation contours in  
2 August 1999.

3 Q. How would groundwater elevation contours be  
4 delineated in that report?

5 A. It's based on the elevations taken from individual  
6 groundwater monitoring wells.

7 So that -- generally they -- well, first they  
8 would -- first they determine the depth to groundwater and  
9 they survey the top of the well and then they fed them  
10 based on that they can tell the elevation of the water in  
11 the well as opposed to mean sea level.

12 So then based on the wells that they took depth  
13 of the water levels, they would then create these types of  
14 maps.

15 Q. Generally in the general science context, why are  
16 groundwater elevations created?

17 A. Generally to determine the flow direction of the  
18 groundwater.

19 Q. So the concept basically, sir, is you determine  
20 elevations and groundwater typically flows from a high  
21 elevation to a low elevation.

22 A. Yes.

23 MR. MULVIHILL: Objection, leading.

24 BY MR. MALDONADO:

25 Q. With respect to figure 6-1, are the groundwater

1 elevations contoured on that figure?

2 A. Yes.

3 Q. I'm going to bring this up here and we'll go back to  
4 the podium here, please.

5 A. Okay.

6 (Witness steps down.)

7 BY MR. MALDONADO:

8 Q. Further north there is a groundwater elevation listed  
9 for that contour, correct?

10 A. Yes.

11 Q. What is that groundwater elevation?

12 A. The furthest north is 70.5 feet.

13 Q. As you proceed through the area where the eastern  
14 plume is, do those groundwater elevations go up or down?

15 A. As you go in a general southerly direction, they  
16 decrease and they go down.

17 Q. In the environmental context, the groundwater would  
18 flow from a higher elevation to a lower elevation, is that  
19 correct?

20 MR. MULVIHILL: Objection, leading.

21 THE COURT: Sustained.

22 BY MR. MALDONADO:

23 Q. Mr. Dyber, when a flow direction of a plume is  
24 delineated on a map such as this, how are the groundwater  
25 flow directions tabulated?

1 MR. MULVIHILL: Objection.

2 There is no foundation that Mr. Dyber --

3 THE COURT: No foundation.

4 MR. MULVIHILL: He hasn't laid a foundation that  
5 Mr. Dyber knows how to calculate groundwater.

6 THE COURT: Do you know how to calculate  
7 groundwater contours?

8 THE WITNESS: Yes, to some extent, yes.

9 THE COURT: What?

10 THE WITNESS: Yes.

11 THE COURT: What was the end of that, to --

12 THE WITNESS: Yes, to some extent.

13 THE COURT: I didn't understand, to some.

14 THE WITNESS: To some extent.

15 THE COURT: To some extent.

16 THE WITNESS: Yes.

17 BY MR. MALDONADO:

18 Q. Have you in the course of your employment with DEC  
19 taken maps such as 6-1 and plotted the flow direction of  
20 groundwater?

21 A. Yes.

22 Q. And how do you do that, sir?

23 A. Generally, the groundwater flow is perpendicular to  
24 the equal --

25 THE COURT: And you have made those calculations

1       yourself.

2       A.    Yeah.

3               It's not so much calculations, it's plotting.

4               THE COURT:  And you have done that?

5               THE WITNESS:  Yes.

6               THE COURT:  Okay.

7               Go ahead.

8       A.    It goes generally perpendicular to the these equally,  
9       I guess, elevation lines.

10              THE COURT:  All right.

11              THE WITNESS:  And the direction from high  
12       elevation to lower elevation.

13       BY MR. MALDONADO:

14       Q.    Mr. Dyber, I'm going to ask you, please, to draw from  
15       that point down where you would start the --

16              THE COURT:  For the record, from what point?

17              MR. MALDONADO:  From the X that's drawn in the  
18       middle of this map, in a southerly direction or whatever  
19       direction you deem the groundwater flowing based on this  
20       map to please draw the groundwater flowing.

21              MR. MULVIHILL:  Objection.

22              This calls for expert testimony, your Honor.  
23       Having him calculate what was perpendicular at a  
24       particular time is more properly the subject of expert  
25       testimony.

1 THE COURT: I'll take it for what it's worth,  
2 which may be negligible or meaningful.

3 Go ahead.

4 A. Again, this is very approximate because these are  
5 approximations.

6 THE COURT: It's very approximate, is that what  
7 you said?

8 THE WITNESS: These are rough estimates.

9 THE COURT: Okay.

10 THE WITNESS: Because --

11 THE COURT: With that being understood. Go  
12 ahead.

13 THE WITNESS: Yes.

14 A. We are drawing from there down, draw a right angle or  
15 right angles.

16 That's kind of the best I can do.

17 Q. All you did, sir, was draw perpendicular lines to the  
18 contour lines?

19 A. Yes.

20 Q. Fair enough. Thank you.

21 You can take your seat again on the stand, sir.

22 (Witness resumes the stand.)

23 BY MR. MALDONADO:

24 Q. We also took a look at the delineated plume the OU 2  
25 ROD that emanated from the Frost Street site.

1                   Based upon a look at that plume are you able to  
2                   determine the groundwater direction?

3           A.    I would much prefer to have that sort of thing where  
4           I have groundwater --

5                   THE COURT:  Is it that you can't definitively  
6                   answer that question based on the representation shown to  
7                   you?

8                   Is that your response?

9                   THE WITNESS:  I think that's -- I think that --  
10           I think that the accuracy that I could draw -- that I  
11           could attempt to draw a plume would be much diminished as  
12           opposed to even --

13                   THE COURT:  Sir, that's fine.

14                   Another question.

15           BY MR. MALDONADO:

16           Q.    Are you familiar with a technique called center plume  
17           groundwater flow analysis?

18           A.    I mean, I don't think I have encountered that in the  
19           past.

20           Q.    Okay.  Fair enough.

21                   So in your view, Mr. Dyber, the most accurate  
22           way to determine the groundwater flow direction is to use  
23           groundwater flow contours and to draw perpendicular lines?

24                   MR. MULVIHILL:  Objection, mischaracterizes.

25                   THE COURT:  Sustained.



1 BY MR. MALDONADO:

2 Q. Now, there came a point in time, sir, when the OU 3  
3 ROD was issued, and what was the purpose of issuing the OU  
4 3 ROD?

5 A. The select the remedy to clean up the OU 3 area.

6 Q. How many plumes are identified in the OU 3 ROD?

7 A. Three.

8 Q. What were they called?

9 A. Eastern, central and western plumes.

10 Q. And the investigation of those plumes, we looked at  
11 the exhibits already, with all the data points --  
12 investigation was done by punching a series of wells  
13 through the New Cassel area and the area south of Old  
14 Country Road to determine the locations of the three wells  
15 and they are on these figures, 3-4, 3-5 and 3-6 from the  
16 2000 RI.

17 Is that correct?

18 MR. MULVIHILL: Objection, leading.

19 THE COURT: Sustained.

20 BY MR. MALDONADO:

21 Q. What were the purposes of drilling these holes as  
22 depicted on 3-4, 3-5 and 3-6?

23 A. To determine its nature and extent of groundwater  
24 contamination.

25 Q. Mr. Dyber, as we sit here today, you know where the

1 eastern plume is, correct?

2 MR. MULVIHILL: Objection, calls for --

3 THE COURT: Sustained.

4 BY MR. MALDONADO:

5 Q. Does the figure 3-2 before the judge demonstrate the  
6 location of the eastern plume as we know where it is  
7 today?

8 MR. MULVIHILL: Objection, calls for expert  
9 testimony.

10 THE COURT: Sustained.

11 MR. MALDONADO: Withdrawn, your Honor.

12 BY MR. MALDONADO:

13 Q. Mr. Dyber, what does figure 3-2 represent with  
14 respect to the plume designated eastern plume on the  
15 figure?

16 A. Well, it shows approximations of the groundwater  
17 contamination contour lines based on the data that was  
18 used to create that figure.

19 Q. We have already established, sir, at the time the  
20 2003 ROD was done, there was one sample taken in the area  
21 of the eastern plume.

22 MR. MULVIHILL: Objection.

23 BY MR. MALDONADO:

24 Q. Is that correct?

25 THE COURT: Sustained.

1 BY MR. MALDONADO:

2 Q. How many samples were taken in the area of the  
3 eastern plume prior to the issuance of the EPA OU 3 ROD?

4 MR. MULVIHILL: Objection.

5 THE COURT: It's asked and answered.

6 MR. MULVIHILL: It also hasn't been established  
7 where the eastern plume is.

8 How can he testify --

9 THE COURT: All right.

10 Let's go on.

11 BY MR. MALDONADO:

12 Q. In the EPA OU 3 ROD, Exhibit 6, sir, I'm going to ask  
13 you to look at Exhibit 5 --

14 THE COURT: Counsel, how much longer do you  
15 anticipate with this witness?

16 MR. MALDONADO: I think, Judge, at most another  
17 45 minutes to an hour.

18 THE COURT: Go ahead.

19 A. You are saying Exhibit -- the EPA OU 1 ROD?

20 Q. The DEC OU 3 ROD, sir.

21 A. Okay. Sorry.

22 (There was a pause in the proceedings.)

23 A. And you are saying figure 6.

24 Okay. I'm looking at figure 6 in the DEC OU 3  
25 ROD.

1 Q. What does that figure -- what is represented in that  
2 figure?

3 A. It says it's the area of historically impacted  
4 groundwater from 1977 to 2000, and it's for the 100 to 124  
5 feet below ground surface.

6 Q. First of all, is that a typographical error in the  
7 legend when it says 1997 to 2000?

8 A. No, I said 1977 to 2000 -- oh, is that a  
9 typographical -- I don't know.

10 Q. Are you aware of any data being collected between  
11 1977 and 1997?

12 A. I don't know if they consider -- because there's been  
13 a lot of data collected on -- in the New Cassel industrial  
14 area for decades.

15 So I don't know if they considered data that was  
16 taken prior to the --

17 THE COURT: So you don't know if it's a  
18 typographical error?

19 THE WITNESS: I don't know if it's a  
20 typographical error.

21 THE COURT: Okay.

22 BY MR. MALDONADO:

23 Q. So figure 5 represents the groundwater -- does figure  
24 5 represent the groundwater contours at the depth of 65 to  
25 99 feet contained in the ROD, the DEC OU 3 ROD?

1 A. Yes, for the years again 1977 to 2000.

2 Q. What does figure 6 of the DEC OU 3 ROD depict?

3 A. It says it's the area of historically impacted  
4 groundwater from 1977 to 2000 from 100 to 124 feet deep  
5 interval.

6 Q. Does it show three separate plumes, sir?

7 THE COURT: Could you stop talking in the back.  
8 Go ahead.

9 A. Figure 6 shows three separate plumes, or depicts  
10 three separate plumes.

11 Q. Was an attempt made in the investigation leading up  
12 to the issuance of the 2003 DEC ROD to delineate the deep  
13 portion below 124 feet eastern plume?

14 A. Eastern plume, without reading the ROD, I don't know.  
15 Again, I'm not --

16 THE COURT: All right. That's your answer. You  
17 don't know.

18 Go ahead.

19 BY MR. MALDONADO:

20 Q. Was a determination made in the DEC OU 3 ROD as to  
21 the location of the eastern plume?

22 A. The location --

23 Q. Below 124.

24 A. Let's see, let me look and see if there is deeper --

25 THE COURT: Sir, you don't have to think out

1       loud because everything you say is being taken down.

2               THE WITNESS:   Okay.

3               THE COURT:   So keep internal comments internal.

4               THE WITNESS:   Okay.

5               THE COURT:   I know it's difficult, but do your  
6       best.

7               THE WITNESS:   All right.

8               THE COURT:   Thank you.

9       A.    I am seeing figures in the OU 3 ROD that depict  
10   deeper and, I guess, deeper groundwater contamination  
11   plumes for the New Cassel industrial area.

12   Q.    Which figure are you referring to, sir?

13   A.    Figure three depicts the plumes from 65 to 200 feet  
14   deep.

15               Figure seven depicts the plumes from 125 to 200  
16   feet deep. Figure three was from 1996 to 2000 and figure  
17   seven is 1977 to 2000.

18               Figure 11 depicts the contamination and plumes  
19   from 125 to 200 feet deep and it's data from 1998 to 2000.

20               Those are the depictions that they have.

21   Q.    So with respect to figure three, sir, that you just  
22   referenced first, it shows three separate plumes, correct?

23   A.    It shows them down to a hundred parts per billion.

24   Q.    Can you point out on this map where Frost Street  
25   monitoring well 7 B would be located?

1 A. Okay.

2 I think over here on that location.

3 Q. Could you mark an X and indicate on that map where  
4 that would be and mark it Frost Street monitoring well 7

5 B.

6 A. Okay.

7 Q. So Frost Street monitoring well 7 B is located in the  
8 area right between the eastern most plume and the central  
9 plume.

10 Is that an accurate statement, sir?

11 A. Well, it appears to be on the edge of the depicted, I  
12 guess, at hundred parts per billion contour of the central  
13 plume.

14 Q. Does a depiction based upon the nondetect data  
15 contained in Frost Street monitoring well 7 B support the  
16 depiction that's on this drawing?

17 MR. MULVIHILL: Objection.

18 BY MR. MALDONADO:

19 Q. Figure 3?

20 MR. MULVIHILL: Leading and calls for expert  
21 testimony.

22 THE COURT: Certainly it's leading.

23 So it's sustained.

24 MR. MALDONADO: Got you.

25 THE COURT: Good.

1 BY MR. MALDONADO:

2 Q. I'm going to show you figure seven now, sir, blown  
3 up.

4 What is this figure?

5 A. It shows, again, a representation of the groundwater  
6 contamination plumes from the New Cassel industrial area  
7 for the depth interval of 125 to 200 feet below ground  
8 surface from the years 1977 to 2000.

9 Q. Can you indicate on figure seven where monitoring  
10 well 7 B is located, Frost Street monitoring well 7 B, as  
11 in boy.

12 A. It's over there, do you want me to writing anything?

13 Q. Yes, please.

14 A. Okay.

15 MR. MALDONADO: Judge, would this be a good spot  
16 to take a break?

17 THE COURT: Sure.

18 We'll resume at 1 o'clock.

19 MR. MALDONADO: Thank you.

20 (Luncheon recess.)

21 (Continued on next page.)

22

23

24

25



## A F T E R N O O N   S E S S I O N

THE COURT: You're still under oath, Mr. Dyber.

THE WITNESS: Yes, ma'am.

THE COURT: Go ahead.

BY MR. MALDONADO:

Q. Good afternoon, Mr. Dyber. We will continue your examination.

I would ask you to look at the EPA OU-3 record of decision and turn to page 15, please.

A. DEC?

Q. The DEC OU-3, yes.

At the bottom of that document, continuing over to the next page, there's a sentence that reads:

The contouring resulted in three individual plume areas over three of the depth intervals examined, 0 to 64 feet below ground surface, 64 to 100 feet below ground surface, 100 to 125 feet below ground surface, with the exception of the deepest level, 125 to 200 feet below ground surface, where only two apparent plume areas are found.

A. Yes, I read along with you.

Q. Do you agree with that sentence?

THE COURT: Does he agree there are only two plume areas?

1 MR. MALDONADO: Two areas at that depth.

2 THE COURT: Do you agree with that statement?

3 A. Based on the data that they took for this and  
4 considered in this ROD, I don't disagree with it. I have  
5 no reason to disagree with it. I have no way of  
6 confirming it.

7 Q. Based on the data you know today, do you agree with  
8 that statement?

9 A. I don't think...

10 THE COURT: Can you answer that question, sir?

11 THE WITNESS: I'm trying to think if I can.

12 (Pause in proceedings.)

13 A. I think there's been a lot of data collected since  
14 this ROD was published, and I think it would be difficult  
15 to see how close this characterization matches the fairly  
16 extensive data that was taken since this ROD was issued.

17 Q. What data in the ROD supports that statement we just  
18 read?

19 A. I think we -- I think since the ROD we've continued  
20 to identify three plumes.

21 Q. At all three depths?

22 MR. MULVIHILL: Objection, mischaracterizes the  
23 ROD.

24 THE COURT: Sustained.

25 He's answered the question. He said three

1 plumes.

2 BY MR. MALDONADO:

3 Q. Based on current data?

4 A. When we're saying current data, the most recent data  
5 we have is a few years old. So, I mean, I don't know if I  
6 call that current data.

7 Q. I'll restate it.

8 The most recent data?

9 A. Through the most recent data, the reports and  
10 everything that's been done, continues to identify three  
11 plumes.

12 Q. Do you know what year, sir, the plume drawn in the  
13 DEC 0U-2 depicted in figure 9 was drawn?

14 A. What year it was drawn?

15 Q. Yes.

16 A. Okay.

17 THE COURT: That's not indicated on the exhibit?

18 MR. MALDONADO: It is.

19 THE COURT: Is this a trick question?

20 MR. MALDONADO: I can lead him.

21 THE COURT: It states it on the exhibit?

22 MR. MALDONADO: Yes.

23 THE COURT: So...

24 BY MR. MALDONADO:

25 Q. Mr. Dyber, was this plume as depicted in figure 9

1 drawn in 1998?

2 A. Was the figure drawn in 1998?

3 I guess the best I can say is it was drawn at  
4 some period of time between the summer of 1998 and when  
5 this ROD was published in March 2000.

6 Q. And this figure was drawn prior to the issuance of  
7 the OU-3 ROD, correct?

8 A. Yes.

9 Q. Do you know why these two plumes are drawn  
10 differently, the plume in the OU-2 ROD for the  
11 decontamination coming from Frost Street properties and  
12 the deeper plume referenced in the OU-3 ROD?

13 MR. MULVIHILL: Objection, leading.

14 THE COURT: Sustained.

15 BY MR. MALDONADO:

16 Q. Mr. Dyber, what are the contour limits of  
17 contamination in figure 7 in the DEC OU-3 ROD?

18 A. Looks like the lowest contaminant concentration  
19 contours were 100 parts per billion of total VOCs.

20 Q. And Frost Street Monitoring Well 7B is located in the  
21 middle of that massive contamination identified in the  
22 figure, correct?

23 MR. MULVIHILL: Objection, leading.

24 THE COURT: Sustained.

25

1 BY MR. MALDONADO:

2 Q. Where is Frost Street Monitoring Well 7B located with  
3 respect to the plume on that map?

4 A. It appears to be between the thousand part per  
5 billion line and the hundred part per billion line.

6 Q. Was 100 part per billion or 1,000 part per billion  
7 levels ever found in the Frost Street Monitoring Well 7B?

8 A. Not in any of the data that we reviewed earlier.

9 Q. Do you know why no samples were taken in the plume  
10 area as inferred south of Old Country Road during the  
11 OU-3, DEC OU-3 investigation?

12 A. I'm not sure that that's correct.

13 The only thing that I know is that you showed me  
14 a few maps with sampling locations, and on those maps  
15 there were no -- well, we had that one in the one location  
16 that was --

17 THE COURT: Sir, is your answer -- initially you  
18 answered this question by saying, I don't know apparently.  
19 I don't know that that's necessarily an accurate  
20 statement, so are you standing by that?

21 THE WITNESS: I'm sorry. I'm confused.

22 BY MR. MALDONADO:

23 Q. Let me restate the question, please.

24 THE COURT: Please.

25

1 BY MR. MALDONADO:

2 Q. We went through the LMS 2000 RI report and identified  
3 the various sampling points that were contained in that  
4 report; do you recall that?

5 A. Yeah, you showed me the figures with different  
6 sampling locations, yes.

7 Q. Then we went through the OU-3 ROD and from the  
8 language of that you were able to determine certain other  
9 points where samples were taken between the 2000 report  
10 and the issuance of a 2003 ROD; do you recall that?

11 A. Yes.

12 Q. We went through the exercise of comparing those  
13 locations to the map, and you testified that one well had  
14 roughly 59 or 60 feet was taken in the area where the  
15 Frost Street eastern plume is located; do you recall  
16 testifying to that?

17 MR. MULVIHILL: Objection, mischaracterizes his  
18 testimony.

19 He testified that was in the area of the eastern  
20 plume as depicted by HDR.

21 THE COURT: That's correct, because I believe  
22 that question was amended by the mistake. Okay.

23 A. Of the maps you showed me, I believe it was just that  
24 one location that was within the depicted eastern plume.

25 Q. The question, sir, is do you know why no other

1 samples were taken in that area?

2 A. I don't know that that's true.

3 THE COURT: You don't know that there weren't  
4 other samples; is that what you're saying?

5 THE WITNESS: I don't know. I have to take his  
6 word for it.

7 THE COURT: Let me ask you something.

8 Would all of the samples ever taken always been  
9 depicted?

10 THE WITNESS: I haven't looked at the other maps  
11 in the ROD. I only looked at the ones he showed me, and  
12 for that matter in the RIFS. I can't take his word for  
13 the fact that that was the entire -- that that was the  
14 entire universe of sampling that was taken.

15 THE COURT: If samplings were taken, would they  
16 be depicted? Would it ever happen that samplings were  
17 taken and not depicted?

18 THE WITNESS: Definitely samples that were taken  
19 for the RI report would have certainly been depicted.

20 I did read somewhere that they did consider data  
21 as part of the RI report that was collected prior to the  
22 RI report, and I'm not sure if that's depicted in the  
23 actual RI report as individual sampling points.

24 THE COURT: Thank you.

25 Go ahead.

1 BY MR. MALDONADO:

2 Q. This depiction of the deeper plume on figure 7 from  
3 the DEC OU-3 ROD, are you able to tell what the flow  
4 direction of that plume is?

5 A. I honestly wouldn't -- I wouldn't feel comfortable.  
6 I wouldn't feel comfortable estimating it from there.

7 Q. Are you able to say, sir, whether the flow direction  
8 of that plume is consistent with the groundwater flow  
9 direction you drew on that map?

10 MR. MULVIHILL: Objection, calls for expert  
11 testimony.

12 THE COURT: I'm sorry, what?

13 MR. MULVIHILL: It calls for expert testimony.

14 THE COURT: The question is whether it conforms  
15 to a line he drew on the other one. Yes, that would call  
16 for an expert. He said he can't answer it, so how can he  
17 say it's accurate in comparison to what he already drew.

18 Sustained.

19 BY MR. MALDONADO:

20 Q. Mr. Dyber, did there come a point in time, after the  
21 issuance of the 2003 DEC OU-3 ROD, that additional  
22 investigation work was conducted in the New Cassel  
23 industrial area site south of OU-3 or south of Old Country  
24 Road?

25 A. Yes, additional sampling was conducted.



1 Q. When was the next sampling event, sir?

2 A. There were -- I believe they continued to sample  
3 existing monitoring wells after the ROD so that was -- so  
4 there were, including the early monitoring wells, so that  
5 I think was the -- would be the first sampling that was  
6 done after the ROD was issued.

7 Q. Are any of those monitoring wells that you testified  
8 to located in the area that's depicted on 3-2 as the  
9 eastern plume?

10 A. I'm not sure.

11 Q. Are you aware of any monitoring wells being installed  
12 in that area prior to the retention of Dvirka & Bartilucci  
13 to do a pre-design investigation?

14 A. I don't know of any new wells, but I really didn't --  
15 I didn't manage the project until we retained Dvirka &  
16 Bartilucci, so I don't have a lot of information on that  
17 period of time.

18 Q. Were you the project manager at the time D&B was  
19 retained to do a pre-design investigation?

20 A. Yes.

21 Q. Do you know if additional wells were installed as  
22 part of that investigation?

23 A. D&B installed a number of temporary monitoring wells  
24 throughout the New Cassel industrial area at several  
25 different depths. I'm not sure if we have any permit

1 monitoring wells.

2 Q. I'm going to show you, sir, what's been marked  
3 Exhibit 11, the pre-design investigation report prepared  
4 by D&B dated April of 2009.

5 MR. MULVIHILL: What number are we up to?

6 MR. MALDONADO: I think it's 11.

7 MR. MULVIHILL: What are 8, 9 and 10? Can we go  
8 through what exhibits 8, 9 and 10 are? First of all, I  
9 don't know which one is which and I've only been given  
10 two.

11 MR. MALDONADO: She marked a number of them  
12 during the lunch break as instructed.

13 (Pause in proceedings.)

14 THE COURT: Are we straight on the exhibits now?

15 MR. MULVIHILL: Yes, thank you.

16 BY MR. MALDONADO:

17 Q. Mr. Dyber, as a result of the D&B investigation that  
18 occurred prior to 2009, do you know how many additional  
19 wells were installed?

20 A. We have temporary monitoring wells. Let me find the  
21 figure.

22 Q. How many, sir?

23 A. I'm looking.

24 (Pause in proceedings.)

25 Looks like they did 10 temporary monitoring well

1 locations. I'm sorry, 9 temporary monitoring well  
2 locations.

3 Q. Of the 9 temporary monitoring wells, were any  
4 installed within the area designated eastern plume on  
5 figure 3-2?

6 If you want, you can get up and look at it.

7 THE WITNESS: I'll take a quick look over there  
8 to refresh my memory.

9 (The witness steps down.)

10 (The witness resumes the stand.)

11 A. Looks like one of the locations TMW-7 was installed  
12 within that depicted area.

13 THE COURT: Excuse me. Off the record.

14 (A discussion is held off the record.)

15 BY MR. MALDONADO:

16 Q. I'm sorry, sir, do you know what the results of that  
17 TMW-7 were?

18 A. Within the figure I'm reading shows the results in  
19 total volatile organic compound concentrations for several  
20 different depths.

21 It says that 65 feet, 468 parts per billion; at  
22 85 feet, 494 parts per billion, and 105 feet, 959 parts  
23 per billion, and 125 feet, 917 parts per billion, and 145  
24 feet, 876 parts per billion, and 165 feet, 763 parts per  
25 billion, and 185 feet deep, 11,734 parts per billion, 205

1 feet deep, 7,113 parts per billion, and 225 feet deep, 136  
2 parts per billion, and 245 feet, 145 parts per billion, at  
3 265 feet, 69 parts per billion, and at 285 feet, 54 parts  
4 per billion.

5 Q. In addition to the temporary monitoring wells, were  
6 other wells sampled as well, figure 3-2-1, sir?

7 THE COURT: You mean in the other plumes?

8 MR. MALDONADO: As part of the investigation  
9 were other existing monitoring wells sampled.

10 THE COURT: Just in the entire area.

11 MR. MALDONADO: That's the first question.

12 (Pause in proceedings.)

13 A. Yes, it seems like a number of existing monitoring  
14 wells were sampled as part of this work.

15 Q. Were any of those monitoring wells that were sampled  
16 located within the plume area on figure 3-2 designated the  
17 eastern plume?

18 A. No, none of them appear to be within that depiction.

19 Q. Did there come a point in time, sir, when you hired  
20 another -- when I say you, DEC hired another contractor to  
21 conduct an investigation of the DEC OU-3 after the D&B  
22 report prepared in 2009?

23 A. We hired another firm to continue with the remedial  
24 design.

25 Q. What was the name of that firm?

1 A. HDR.

2 Q. I show you, sir, a report prepared by HDR in March of  
3 2010 called the pre-design investigation evaluation  
4 report.

5 Sir, is it fair to say that HDR did not do any  
6 sampling when they prepared this report?

7 (Pause in proceedings.)

8 A. It seems, yes, you're correct.

9 Q. Did they propose a sampling ground of additional  
10 samples to be conducted after the date of this report?

11 A. As part of the work they proposed.

12 Q. What is the work that they proposed in this report?

13 A. We have -- well, I think they're proposing to install  
14 additional monitoring wells, and they're modifying the  
15 locations of the proposed extraction wells or at least one  
16 of the proposed extraction wells.

17 Q. On page 16 of that report, sir, there's a sentence  
18 that reads:

19 Improvement to the existing groundwater  
20 monitoring network are required for the design of a  
21 remediation system to address the groundwater  
22 contamination within the off-site study area.

23 Do you agree with that statement at the time?

24 A. Yes.

25 Q. Why did you agree with that statement?

1 A. One of the main reasons when you do additional  
2 monitoring wells was because the subsequent work which was  
3 originally proposed in HDR's work plan included a pump  
4 test.

5 And when you do a pump test, you pump the water  
6 from one well and you monitor the water levels at that  
7 well and other wells around it.

8 So you need -- and some of these wells were  
9 installed so that they could have -- so they could monitor  
10 wells near the pumping well and use that information and  
11 design the full scale extraction treatment system.

12 Q. In addition to the extraction wells, HDR was  
13 recommending installing a series of monitoring wells in  
14 and around the area that is identified on figure 3-2 as  
15 the eastern plume; is that correct?

16 MR. MULVIHILL: Objection, leading.

17 THE COURT: Sustained.

18 BY MR. MALDONADO:

19 Q. Did HDR, in that 2010 report, suggest installing  
20 monitoring wells around the eastern plume?

21 (Pause in proceedings.)

22 A. Looks like some of the monitoring wells that were  
23 proposed were in the eastern plume area.

24 Q. Did there come a point in time when those monitoring  
25 wells were installed?

1 A. Yes.

2 Q. Who did that work?

3 A. HDR and the subcontractors.

4 Q. Was that work summarized in any report?

5 A. It's the pre-design investigation report.

6 Q. That's exhibit 5 before you, sir, a report prepared  
7 by HDR entitled pre-design investigation dated December of  
8 2011.

9 A. Yes.

10 Q. I would ask you, sir, to look at the site plan  
11 contained in that document.

12 A. That's figure 2 or sheet 2?

13 Q. Sheet 2, yes.

14 A. Yes.

15 Q. What does sheet 2 indicate, sir?

16 A. It shows the operable unit three area, various  
17 locations of the monitoring wells, and also the temporary  
18 monitoring wells that D&B put in.

19 Q. Of the monitoring wells that were installed by HDR  
20 prior to 2011, how many of them are located in the eastern  
21 plume area as depicted on figure 3-2?

22 A. Can you repeat the question.

23 THE COURT: How many of the proposed wells  
24 actually were affected in plume three?

25 MR. MALDONADO: He's talking about installed.

1 BY MR. MALDONADO:

2 Q. How many of the installed wells by HDR prior to 2011  
3 are located within the eastern plume as designated on  
4 figure 3-2?

5 A. If you count the extraction well, it appears that  
6 four of the wells within the depicted area.

7 THE COURT: How many that were not extraction  
8 wells?

9 THE WITNESS: Three wells other than the  
10 extraction well.

11 BY MR. MALDONADO:

12 Q. Three monitoring wells and one extraction well?

13 A. Yes.

14 Q. And the extraction well can also be used as a  
15 monitoring well, correct?

16 A. Yes, you can sample that.

17 Q. After the 2011 HDR report, from 2011 to this date,  
18 were any additional sampling points installed anywhere in  
19 the EPA OU-1 area, former DEC OU-3 area?

20 MR. MULVIHILL: Objection, calls for  
21 speculation.

22 THE COURT: Do you know the answer, sir? Could  
23 you answer that with certitude?

24 THE WITNESS: I'm not aware of any.

25 THE COURT: Okay.



1 BY MR. MALDONADO:

2 Q. Are you aware of any additional investigations that  
3 were sanctioned by DEC in that area after the HDR 2011  
4 work?

5 A. No.

6 Q. You're the project coordinator with EPA, correct?

7 A. Yes.

8 Q. Are you aware of any EPA projects that installed  
9 additional wells in that area after 2011?

10 A. No.

11 MR. MALDONADO: I'll ask you to come up to the  
12 figure, sir, 3-2.

13 (The witness steps down.)

14 BY MR. MALDONADO:

15 Q. In 2003, when you did your ROD, the DEC OU-3 ROD, how  
16 many of the data points in this area designated eastern  
17 plume were you able to rely upon.

18 (Pause in proceedings.)

19 A. I'm not sure, because I'm not sure what a couple of  
20 the wells were installed.

21 Q. Which couple of wells are you talking about?

22 A. I'm trying to remember when MW-7 was installed. B-9  
23 and 13 and 14. I'm not remembering when they were  
24 installed.

25 Q. Let's start with the Frost Street Monitoring Wells 13

1 and 14.

2 Do you know who installed them?

3 A. Walden Associates.

4 Q. That was done pursuant to their OU-2 consent order  
5 obligations, correct?

6 A. Yes.

7 Q. Do you know what year the consent order was signed?

8 (Pause in proceedings.)

9 THE COURT: Do you know, sir?

10 THE WITNESS: I need to refresh my memory.

11 MR. MALDONADO: Can you stipulate it was signed  
12 in 2003?

13 MR. MULVIHILL: Yes.

14 MR. MALDONADO: Can we stipulate it was 2003, or  
15 do you want me to show it to him?

16 BY MR. MALDONADO:

17 Q. I'll show you what's been marked as an exhibit.

18 THE COURT: Do you stipulate to that?

19 MR. MULVIHILL: Yes, that this agreement was  
20 entered into in 2003.

21 THE COURT: Okay.

22 BY MR. MALDONADO:

23 Q. Does that refresh your recollection, sir, that the  
24 Frost Street Monitoring Wells 13 and 14 were installed  
25 after the time when the RI report was done for the 2003

1 ROD?

2 A. Yes, it does.

3 They were installed after.

4 Q. What were the other wells you had questions about in  
5 terms of the timing?

6 A. MW-7. I don't remember when that was installed.

7 Q. Temporary monitoring well 7?

8 A. This one, MW-7.

9 Q. The one in green here?

10 A. Yes.

11 Q. That's TMW-7?

12 A. Oh, I didn't see the T.

13 Q. You testified that was installed by D&B, correct?

14 A. Yes.

15 Q. What year was that done?

16 A. It was done after the ROD.

17 Q. Are there any other wells you have questions about  
18 whether or not they were installed prior to the issuance  
19 of the ROD?

20 A. No, it looks like all of the wells depicted there are  
21 post-ROD.

22 (Continued on next page.)

23

24

25

1 THE WITNESS: I take that back, I'm wondering  
2 when B-9 was put in?

3 THE COURT: What?

4 THE WITNESS: I'm revising that. I'm trying to  
5 remember when B-9 was put in.

6 Q What well, sir?

7 A B-9.

8 Q Do you know if that was done before or after the work  
9 on your DEC OU-3 ROD?

10 A I'm trying to remember many of the investigations B-9  
11 was associated with.

12 THE COURT: How much longer for this line of  
13 questioning?

14 MR. MALDONADO: For this line of questioning?

15 THE COURT: For this witness.

16 MR. MALDONADO: Ten minutes, your Honor.

17 Q Mr. Dyber, I'm done with that exhibit.

18 Sir, is it a fair statement to say post-2003  
19 there was available a lot more data in the area depicted  
20 as eastern plume 3-2 than prior to 2003?

21 MR. MULVIHILL: Objection, leading.

22 THE COURT: Sustained.

23 Q Did you have sufficient data in 2003 for you to  
24 delineate the plume area of the Frost Street plume?

25 MR. MULVIHILL: Objection. Calls for an expert

1 testimony.

2 THE COURT: Overruled.

3 A I think as I talked about before, and again I didn't  
4 use this SRI of the report, but it didn't say it took into  
5 account data that was collected prior and prior  
6 investigations before the RF investigations report. I'm  
7 not very familiar with the specifics --

8 THE COURT: Are you saying you can't answer that  
9 question?

10 THE WITNESS: So I don't know. I don't know --  
11 I can't compare the two.

12 Q Did you agree at some point within the delineation  
13 within the figure 3-2 of the eastern plume?

14 A For the purposes of designing a remedy, I didn't see  
15 any reason to tell them to change it.

16 Q In your experience, sir, before you designed a  
17 remedy --

18 THE COURT: Experience as what?

19 MR. MALDONADO: As an environmental project  
20 manager.

21 Q Is it fair to say you need to understand where the  
22 contamination is before you design a remedy to clean it  
23 up?

24 A Yes.

25 Q And that's exactly what happened with respect to the

1 HDR work in the supplemental feasibility study memorandum;  
2 is that correct?

3 MR. MULVIHILL: Objection.

4 THE COURT: Sustained.

5 Q Did there come a point in time, sir, you attended an  
6 EPA public hearing?

7 A Yes.

8 Q And do you recall showing to the public a depiction  
9 of the three plume areas at the meeting?

10 A I wasn't in the audience. I didn't show anyone  
11 anything.

12 Q You were introduced to the audience as the DEC  
13 representative?

14 A I don't remember if I was. But it seemed as if I  
15 could have been.

16 Q So you weren't there as a representative of the New  
17 York State Department of Environmental Conservation?

18 A Yes, I was.

19 Q And there was a plume area map put up at that  
20 meeting. Do you recall that?

21 A I don't recall the specifics of that meeting. It's a  
22 while back. I just remember attending.

23 Q Do you recall whether a handout was given to the  
24 public as to the meeting?

25 A I don't remember.

1 Q What do you remember about that meeting?

2 A I remember that the EPA representatives explained the  
3 PowerPoint presentation where they explained the  
4 contamination and the proposed remedy.

5 Q I will show you an exhibit, sir, and ask you if this  
6 is the PowerPoint presentation that was made at that  
7 meeting?

8 A It's been a long time. I don't remember what it  
9 looked like at the time. I'm not saying --

10 THE COURT: It's understood.

11 Q Did you participate -- strike that.

12 Are you familiar with the public comment  
13 procedure, or the PRAP, was issued?

14 A Yes.

15 Q Was that done in this case?

16 A Yes.

17 Q Did you participate in responding to the comments to  
18 the PRAP in this case?

19 A I believe that the EPA sent us their comments and  
20 proposed responses and we looked at them.

21 THE COURT: The question was did you, you --

22 THE WITNESS: Yes, I, when they sent me their  
23 comments and proposed responses.

24 THE COURT: Who is "they," sir.

25 THE WITNESS: The EPA sent me their comments and

1 proposed responses and I looked at them.

2 Q Mr. Dyber, I'll ask you to look at comments three and  
3 four in the ROD.

4 A Okay.

5 THE COURT: Let us know when you have your  
6 answer. Are you done?

7 THE WITNESS: It's been a long time.

8 THE COURT: All right.

9 THE WITNESS: I'm sorry. I'm almost done.

10 THE COURT: Maybe you can bring up three and  
11 four.

12 THE WITNESS: Okay, I've read those comments.

13 THE COURT: Do you agree with those comments?

14 Q First, did you participate in preparing the responses  
15 to those comments?

16 A My memory was I reviewed, looked at their responses.

17 Q Did you agree with the EPA's responses?

18 A Did I agree at the time? I'm not certain. I'm not  
19 certain whether I had any -- whether at the time I had any  
20 comments on their comments.

21 Q Do you presently agree with those comments?

22 MR. MULVIHILL: Objection. Kind of a compound  
23 question. Two comments. There's a lot of facts. Each  
24 comment has a number of different facts in them. It's  
25 kind of a blanket question.



1 of the data.

2 Obviously the fact that MW-15 is at one depth  
3 and was only sampled once during all our investigations.  
4 So that makes it -- that to me makes -- is an indication  
5 to pause as to whether that one sample at that one depth  
6 is the basis of a separation between the plumes or a clean  
7 separation between the plumes.

8 Obviously some of the maps that you showed me  
9 from the ROD had showed commingling between the plumes in  
10 the past. So those are the general, those are my general  
11 concerns with that statement.

12 MR. MALDONADO: Permission to lead, your Honor.

13 THE COURT: I thought you would be done with him  
14 but you're not.

15 MR. MALDONADO: I have to clarify that answer,  
16 please.

17 THE COURT: Clear it up? I don't know. It's  
18 pretty clear.

19 MR. MALDONADO: Well, I'll make it clearer for  
20 you.

21 THE COURT: I'm clear. I don't need it clear,  
22 but thank you.

23 Any other area of inquiry for the defendant?

24 Q Mr. Dyber, did you give an affidavit in this case in  
25 support of the approval of the concept decree consented to

1 THE COURT: Forgive me. Is there anything in  
2 either of those two comments that today you would  
3 disapprove? Is that the question?

4 MR. MALDONADO: That is the question, your  
5 Honor.

6 A The one thing that leaps out at me was the sentence,  
7 lack of contamination detected, the lack of contamination  
8 detected in MW-15 also supports the conclusion that the  
9 OU-1 eastern groundwater plume is separate from the UO-1s  
10 central plume and the groundwater flow is toward the south  
11 southwest.

12 The rest of it I agree with, but that MW-15  
13 supports that conclusion. That's the thing that leaps out  
14 at me.

15 Q Why do you disagree with that?

16 THE COURT: Well, he didn't say he disagrees  
17 with it. It leaps out at him.

18 Q How does it leap out at you?

19 A I think there may be between the eastern and central  
20 plumes.

21 Q Based on what data, sir?

22 A Couple of things. First of all, HDR in most of the  
23 reports they gave us, stated that the plumes overlap at  
24 the edges, so that is something that may indicate that,  
25 and they took the data and that was their interpretation

1 by other parties?

2 A Yes.

3 Q In that affidavit did you characterize the three  
4 plumes, central, eastern and western as distinct plumes?

5 A Yes.

6 Q Do you stand by that statement today?

7 A Yes.

8 MR. MALDONADO: No further questions, your  
9 Honor.

10 THE COURT: Okay. We'll take ten minutes.

11 MR. MULVIHILL: Thank you, your Honor.

12 (Whereupon, a recess was taken.)

13 (Continued.)

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1 CROSS-EXAMINATION

2 BY MR. MULVIHILL:

3 THE COURT: You are still under oath, Mr. Dyber.

4 THE WITNESS: Yes, your Honor.

5 Q Good afternoon, Mr. Dyber. My name is Dan Mulvihill,  
6 Assistant Attorney General, and I'm counsel for the  
7 plaintiff, the State of New York in this matter.

8 I'd like you to take a quick look back at a  
9 couple of exhibits that have been marked 8, 9 and 10 on  
10 these figures.

11 We'll start with, Mr. Dyber, this is Exhibit 8.  
12 This was Exhibit 8 that was shown to you. Can you just  
13 read what the title of that is?

14 A Monitoring well samples, April 1999, round one.

15 Q And can you read what the name of figure 5 is?

16 A Monitoring well samples, August 1999, round two.

17 Q And finally this one, 3.6.

18 A Monitoring well samples, January 2000, round three.

19 Q Do you know during the compiling of the RI report,  
20 whether LMS considered sampling other than those three  
21 rounds of sampling depicted on those demonstratives?

22 A Again, as I stated before, there are RI reports that  
23 they also considered earlier sampling.

24 Q Just look at this figure, 3.4 for a second. Actually  
25 let's go to the easel.

1 Do you remember being asked if there were any  
2 wells on figure sampled on 3.4 that were in the area that  
3 is depicted as the eastern plume on figure 3.2.

4 Do you remember being asked that?

5 A Yes.

6 Q And you said you responded that there was one well?

7 A Yes.

8 Q And --

9 A Is that 3-4? No, that's 3-6. That's 3-4. Yes, I  
10 said there was one well within the depicted area.

11 Q Within the depicted area. Where is EW 1-B and 1-C on  
12 the map drawn by HDR in 3.2?

13 A It's here (indicating.)

14 Q Can you say for the record where it is in relation to  
15 the plumes that are drawn by HDR?

16 A It's west of the depictions.

17 Q EW 1-B and 1-C, were they tested in April of 1999?

18 A They are on this figure as the monitoring wells that  
19 were sampled.

20 Q And were they sampled in January of 2000?

21 A Yes.

22 MR. MULVIHILL: Thank you. That's all I have on  
23 that.

24 You may take a seat.

25 Q Look at Exhibit 6 which is the New York State

1 Department of Environmental Conservation Record of  
2 Decision from 2003?

3 A Okay.

4 Q And if you could turn, I beg your pardon, to see if I  
5 could find it. I had it marked.

6 If you could turn to table 3.

7 A Yes.

8 Q And what is table 3, just the name of it?

9 A It says early warning monitoring wells sampling  
10 results EW 1-B, shallow well at 164 feet BGS Flower and  
11 Iris Streets.

12 Q Was PCE detected in EW 1-B in April of 1999?

13 A Yes.

14 Q And at what concentration?

15 A 620 parts per billion.

16 THE COURT: I'm sorry. What is that?

17 MR. MALDONADO: PCE.

18 THE COURT: And the level?

19 THE WITNESS: 620 parts per billion.

20 Q And was TCE detected in that well in April of 1999?

21 A Yes.

22 Q And at what level?

23 A 75 parts per billion.

24 Q What was detected -- was PCE detected in that EW 1-B  
25 in August of 1999?

1 A Yes.

2 Q And at what level?

3 A 750 parts per billion.

4 Q And was TCE detected in that well in August of 1999?

5 A Yes.

6 Q What concentration?

7 A 90 parts per billion.

8 Q Moving down just one more to January of 2000. Was

9 PCE detected in that well in January of 2000?

10 A Yes.

11 Q And at what concentration?

12 A 1100 parts per billion.

13 Q And finally with, was TCE detected in that well in  
14 January of 2000?

15 A Yes.

16 Q At what concentration?

17 A 150 parts per billion.

18 MR. MULVIHILL: Thank you.

19 Q Mr. Dyber at the very end of your direct examination  
20 you were asked about the affidavit that you submitted in  
21 support of the state's motion to approve consent decrees?

22 A Yes.

23 Q In that affidavit you stated that there are in the  
24 OU-3 area or the EPA-1 area there are three distinct  
25 plumes?

1 A Yes.

2 Q What do you mean by distinct?

3 THE WITNESS: Well, if you can pass the  
4 affidavit. May I? You have a copy of it.

5 MR. MULVIHILL: I do, your Honor, but it has my  
6 handwriting on it.

7 THE WITNESS: I'll answer it generally.

8 A The next two sentences in that affidavit explain what  
9 I mean, that there are different -- there were different  
10 relative levels of chemicals in the different plumes.  
11 That's what I meant by distinct.

12 THE COURT: I'm sorry. Could you say that  
13 again.

14 THE WITNESS: Well, I'll be more specific now  
15 that I have the affidavit. It says, I say OU-3 consists  
16 of three distinct off site groundwater plumes, primarily  
17 located in the south of the NCIA. The eastern plume is  
18 comprised predominantly of TC with some PC and very low  
19 111 PCA. The central plume consists of PCE, TCA and TCE.  
20 So that's the distinction that I made there.

21 THE COURT: Excuse me. I have a question about  
22 that. So the TCE and the PCE, we know, you've said, and I  
23 believe, correct me if I'm wrong, that it is understood  
24 that the Frost site businesses emitted these two  
25 contaminants, correct?



1 THE WITNESS: Both were found at the site.

2 THE COURT: What?

3 THE WITNESS: Both were found at the the site.

4 THE COURT: And the type of manufacturer in  
5 dispute there, can it be said, generally produces those  
6 contaminants?

7 THE WITNESS: These are chemicals that are  
8 solvents that are used in a lot of different industries.

9 THE COURT: Okay. The businesses that were in  
10 the central plume, did they, were they known to produce  
11 these types of chemicals as well?

12 THE WITNESS: Well, they used them in -- they  
13 used them in their manufacturing process.

14 THE COURT: They also did?

15 THE WITNESS: Yes.

16 THE COURT: Okay.

17 And the western as well?

18 THE WITNESS: Yes. All three plumes have these  
19 chemicals in them and like I said they are common  
20 industrial solvents.

21 THE COURT: Thank you.

22 MR. MULVIHILL: Your Honor, I have no further  
23 questions

24 THE COURT: All right.

25

1 REDIRECT EXAMINATION

2 BY MR. MALDONADO:

3 Q A few questions, Mr. Dyber, please.

4 With respect to the three plumes, do they each  
5 have a distinct chemical marker?

6 A They have relative concentrations of these chemicals.

7 Q Correct. And with respect to the eastern plume, you  
8 have a plume that is PCE and TCE with more PCE present in  
9 that plume, correct?

10 A Yes, relatively more PCE than TCE.

11 Q With respect to the central plume, you have another  
12 compound in there, 1,1,1 TCA, correct?

13 A There is 1,1 TCA in the central plume.

14 Q That is fairly unique to the central plume when you  
15 compare the central, eastern and western plumes, correct?

16 A I believe there was --

17 THE COURT: Wait a minute, what was fairly mean.

18 MR. MALDONADO: I'll restate the question.

19 THE COURT: Okay.

20 Q With respect to the eastern plume, you would agree  
21 it's primarily a PCE, TCE plume, correct?

22 A There were some concentrations of TCA which is  
23 another type, another industrial solvent, but the eastern  
24 plume is predominantly WC with some TC.

25 Q What is the central plume predominantly?

1 A It's just the three chemical, PCE, TCE, and TCA.

2 Q And the levels of TCA in the central plume are  
3 considered to be at higher levels than the other two  
4 plumes; is that correct?

5 MR. MULVIHILL: Objection, leading.

6 THE COURT: That's okay. Go ahead.

7 A To my memory, that the central plume and its entire  
8 concentrations in the TCA than the central plume.

9 Q And the western plume.

10 A Yes. Refreshing my memory, I believe there is  
11 minimal TCA.

12 Q So in your affidavit when you say distinct, there are  
13 three different types of chemical signatures for each of  
14 the plumes and that makes them distinct?

15 MR. MULVIHILL: Objection, leading.

16 THE COURT: That's fine, go ahead.

17 MR. MALDONADO: Is that correct?

18 THE COURT: Is that correct, sir?

19 A Signatures? I mean what I'm comfortable saying is  
20 they have generally, generally relative, relative,  
21 relative concentration. The chemicals have certain,  
22 generally have certain relative concentrations to each  
23 other. I guess the signature -- I know what a written  
24 signature is. A chemical signature?

25 Q Throw aside the word "signature" and let's get to

1 absolutes. The western plume is a plume comprised  
2 primarily of TCE with some PCE; is that correct?

3 A In my affidavit, I wrote that it consists of both  
4 chemicals, but I would have to look, look at the data to  
5 confirm the relative concentrations between the two  
6 compounds.

7 Q Could you determine that by looking at the figure  
8 3-2?

9 A That would be some indication. It is only one --

10 THE COURT: Would it be definitive.

11 A Would it be definitive? I don't think 3-2 would be  
12 definitive. It's only one set of data.

13 Q Would figure 3-1 with all the data help you there,  
14 sir?

15 A That would be more helpful.

16 Q Showing you 3-1 from the HDR O'Brien Gear 2013  
17 supplemental feasibility study?

18 MR. MULVIHILL: Your Honor, I just object to the  
19 characterization as having all of the data.

20 THE COURT: I'll let the witness clarify that.

21 MR. MULVIHILL: No, my objection is that chart  
22 doesn't have all the data.

23 THE COURT: I understood.

24 A Now that I'm looking at this, this has more data but  
25 it's older data. I'll take a look at it.

1           Okay. Just looking at the western-most  
2 temporary monitoring wells, I'm seeing that one of the  
3 temporary monitor wells appears to have TMW-2 EC than PC  
4 than most of depth, while TMW-1 has more PCE than most of  
5 the depths and TMW-9 I'm pretty sure is in the western  
6 plume has more PCE. TMW-9, some of them you have more  
7 PCEs, some more TCEs. So from what you just showed me, I  
8 don't think for the western plume at least you can  
9 conclude from this figure that it goes either way.

10       Q     Let me approach this a different way, Mr. Dyber.

11           With respect to the HDR OBG July 2013,  
12 supplemental FS memorandum that you've reviewed, there is  
13 a sentence there that reads, consistent with NYSDEC's FS,  
14 there appears to be three separate plumes within OU-1 with  
15 different contaminant profiles?

16           Do you agree with that statement?

17       A     Generally.

18       Q     Did you review that statement when it was presented  
19 to you in draft form?

20       A     I reviewed the fairly large report.

21       Q     And the final version went out with a statement  
22 saying there are three separate plumes with different  
23 contaminant profiles?

24       A     Like I said, generally.

25       Q     And the contaminant profile of the central plume is

1 what?

2 A In the affidavit, it says consists of PC, TC and TCA.

3 Q What did you say in your affidavit that the eastern  
4 plume consisted of?

5 A Comprised predominantly with PC with some TC and very  
6 little 1,1,1 TCA.

7 Q But that has a different chemical profile than the  
8 eastern plume depths?

9 A Generally.

10 Q And based upon chemical profiling, you made a  
11 statement in an affidavit that they are distinct plumes?

12 A Yes.

13 Q Now, with respect to your testimony on DW 1-B and C.

14 A Yes.

15 Q I will show you the figure 3-2 again, sir?

16 A Okay.

17 Q I'll ask you to please get up and point them out?

18 A 1-B and 1-C are here.

19 THE COURT: Point to the locations.

20 A EW 1-B and EW 1-C on sheet 3-2.

21 Q Where is monitoring well cross street 7-B.

22 A It is where I marked it.

23 Q Would you agree, sir, the depth of 7-B is the  
24 approximate depth of EW 1-B?

25 A I have to look that up.

- 1 Q Would this be on the diagram here, figure 3-1?
- 2 A No.
- 3 Q What is the depth of EW? Sir, 3-7, are the depths
- 4 listed in the summaries?
- 5 A 3-7?
- 6 Q Figure 3-7?
- 7 A EW-1 is 154 to 164 feet deep.
- 8 Q How deep was Frost Street Monitoring Well 7-B?
- 9 A 7-B?
- 10 Q Yes, sir.
- 11 A The one depth, 148 feet deep.
- 12 Q So back to the diagram, sir, the depth. If you could
- 13 approach the chart.
- 14 A Okay.
- 15 Q The well depth of 7-B is possibly the same depth as
- 16 EW 1-B?
- 17 A I'm sorry. Could you read back my answer for EW 1-B?
- 18 (Record read.)
- 19 Q So they are approximately the same depth?
- 20 A EW 1-B is a little deeper.
- 21 Q About ten feet deeper at most?
- 22 A About that.
- 23 Q And 7-B is tested negative for PCE and TCE at all
- 24 times that it was tested, correct?
- 25 A All the data I've seen during this examination.

1 Q And 7-B lies on the western edge of the eastern  
2 plume, correct?

3 A Well --

4 MR. MULVIHILL: Objection, your Honor.

5 THE COURT: Which is?

6 MR. MULVIHILL: Depicted in the HDR map.

7 THE COURT: Go ahead.

8 A It's on the western edge of the plumes depicted on  
9 this map.

10 Q So is it your testimony, sir, that the contamination  
11 now migrated past 7-B into EW 1-B?

12 MR. MULVIHILL: Objection, mischaracterizes the  
13 testimony.

14 THE COURT: Sustained.

15 Q What is the significance of the contaminations found  
16 in EW 1-B in the context of delineating the plumes in this  
17 case?

18 MR. MULVIHILL: Objection, your Honor. Calls  
19 for expert testimony.

20 THE COURT: Sustained.

21 MR. MALDONADO: No further questions on that  
22 point, your Honor.

23 THE COURT: Recross?

24 No?

25 MR. MALDONADO: If I could find my notes.



1 THE COURT: I'm sorry, I thought you were  
2 finished.

3 MR. MALDONADO: I'm looking for my notes. I  
4 thought I was almost done.

5 THE COURT: I misunderstood. I'm not pushing  
6 you.

7 MR. MALDONADO: No further questions, your  
8 Honor.

9 MR. MULVIHILL: No further questions, your  
10 Honor.

11 THE COURT: You may step down, sir. Thank you  
12 very much.

13 MR. MULVIHILL: Your Honor, I would like to  
14 address just the issue of which documents were moved into  
15 evidence during Mr. Dyber's testimony.

16 THE COURT: Can't you do that --

17 MR. MULVIHILL: Well, there were some documents  
18 I agreed could be moved into evidence before, before  
19 Mr. Dyber took the stand, but there were some documents  
20 that were not agreed upon.

21 THE COURT: Are you objecting to the admission  
22 of those?

23 MR. MULVIHILL: There would be two.

24 THE COURT: Which are?

25 MR. MULVIHILL: Which are, the first one is

1 Exhibit 4 which is you might recall I objected because it  
2 was not on the pretrial order and was questionably not  
3 produced in this litigation. The final exhibit.

4 THE COURT: Let's talk about the pretrial order.  
5 That was drafted when?

6 MR. MULVIHILL: That was drafted last summer,  
7 your Honor.

8 THE COURT: It hasn't been updated?

9 MR. MULVIHILL: You may recall that my office a  
10 few weeks ago wrote a letter to the Court asking for leave  
11 to amend the pretrial order to add two documents to our  
12 exhibits.

13 THE COURT: Was this one one of them?

14 MR. MULVIHILL: No, this wasn't, your Honor.  
15 We're not seeking to move this into evidence.

16 THE COURT: Okay. But the defendants did not  
17 seek to amend the pretrial order; is that correct?

18 MR. MULVIHILL: That is correct.

19 THE COURT: And I denied that application.

20 MR. MULVIHILL: No, you granted that  
21 application. You granted my application, the state's  
22 application.

23 THE COURT: But you should have sought to amend  
24 this particular one. Is that your argument?

25 MR. MULVIHILL: Yes.

1 MR. MALDONADO: This is an exhibit prepared  
2 possibly three weeks ago --

3 THE COURT: You told us that.

4 MR. MALDONADO: And it's not on the pretrial  
5 order. I grant that. It was produced to the state in  
6 terms of the normal course of its production and produced  
7 to them in the course of this litigation last week, I  
8 believe.

9 THE COURT: But you could have sought to amend  
10 three weeks ago.

11 MR. MALDONADO: I could have, your Honor.

12 THE COURT: And did not.

13 MR. MALDONADO: Did not.

14 I'm making that application now to amend the  
15 pretrial order.

16 THE COURT: I'll look at that.

17 MR. MALDONADO: The testimony came in regarding  
18 the levels. I assume that stands.

19 THE COURT: Unless it is created somewhere else.

20 MR. MALDONADO: Mr. Dyber testified to it.

21 THE COURT: Was he doing it based on a possibly  
22 non-offered documents or were there documents from his own  
23 recollection and testimony that substantiated that  
24 statement?

25 MR. MALDONADO: I believe each has a

1 recollection concerning the data of the site, your Honor.

2 THE COURT: You are saying there is nothing new  
3 in that record --

4 MR. MALDONADO: 7-B has been a clean well  
5 forever.

6 THE COURT: Which is nothing new, according to  
7 you.

8 MR. MALDONADO: What Mr. Dyber has testified to.

9 THE COURT: Was he testifying based on the  
10 document that the state wishes to include or not include  
11 in the pretrial order?

12 MR. MALDONADO: He's testifying based upon his  
13 understanding of the site, your Honor.

14 THE COURT: So you don't need that document,  
15 correct?

16 MR. MALDONADO: I would like to have the  
17 document in evidence, your Honor.

18 THE COURT: Why?

19 MR. MALDONADO: I don't think there is any  
20 prejudice in putting it in.

21 THE COURT: Why do you need it in if it doesn't  
22 substantiate or back up anyone's testimony?

23 MR. MALDONADO: It's a document that should be  
24 in the record, your Honor. It shows the data without any  
25 bias. It shows the data collected for the last --

1 THE COURT: Find me some law where you can  
2 submit something at the trial that was not included in the  
3 pretrial order.

4 MR. MALDONADO: Yes, your Honor.

5 THE COURT: Okay.

6 MR. MULVIHILL: Your Honor, just one more  
7 document which is a document which is on defendant's  
8 pretrial order but is not a document that we would consent  
9 to.

10 THE COURT: Which is what?

11 MR. MULVIHILL: It is, I believe, Exhibit 12,  
12 the EPA proposed cleanup plan, a hand-out that was shown  
13 to Mr. Dyber.

14 THE COURT: At the public meeting?

15 MR. MULVIHILL: Public meeting.

16 THE COURT: The PowerPoint.

17 MR. MULVIHILL: That's what it is, the  
18 PowerPoint.

19 THE COURT: It comes in. If it was on there and  
20 you didn't object to it, it comes in.

21 MR. MULVIHILL: I'm sorry.

22 One more thing. Just to clarify, we anticipate  
23 recalling Mr. Dyber during our rebuttal case.

24 THE COURT: Okay.

25 Do you have another witness?

1 MR. MULVIHILL: We do. We call Brian Caldwell  
2 to the stand, your Honor.

3 THE COURT: Please raise your right hands.

4 B R I A N C A L D W E L L ,

5 called as a witness, having been first  
6 duly sworn, was examined and testified  
7 as follows:

8 THE COURT: Take a seat and in a loud, clear  
9 voice, state your name and your title or position or  
10 whatever.

11 THE WITNESS: My name is are Brian Caldwell, and  
12 I'm a senior hydrogeologist.

13 THE COURT: By whom are you employed, sir.

14 THE WITNESS: Company called Ensafe Environment  
15 Engineering.

16 DIRECT EXAMINATION

17 BY MR. MALDONADO:

18 MR. MALDONADO: Judge, I'll attempt to qualify  
19 this witness as an expert.

20 THE COURT: In what?

21 MR. MALDONADO: Groundwater geology, plume  
22 mapping.

23 THE COURT: He can go for the hydrogeology. He  
24 has a degree on that; am I correct?

25 THE WITNESS: In geology.

1 MR. MALDONADO: Shall I go through the whole  
2 process?

3 THE COURT: I don't quite understand how you  
4 will qualify him as an expert in plumes.

5 MR. MALDONADO: I'll go through it, your Honor.

6 Q Mr. Caldwell, briefly describe for the Court your  
7 educational background?

8 A I have a BS, a Bachelor's and a Master's in Geology  
9 from Forest State University.

10 Q Have you been employed as an environmental consultant  
11 upon graduation from Forest State?

12 A No, I spent two years --

13 THE COURT: That's the answer, sir. No.

14 Q Post graduation from college, what employment  
15 background do you have?

16 A Two years with Florida geological surveyors as a  
17 research geologist working with the ambient monitoring  
18 water program, three years as a hydrogeologist, and I went  
19 into consulting.

20 THE COURT: Let me ask you sir. Is there  
21 actually a degree in hydrogeology.

22 THE WITNESS: There is now and there were in  
23 other schools when I was --

24 THE COURT: But you do not have one.

25 THE WITNESS: Florida State didn't offer one

1 specifically.

2 THE COURT: Did you have any -- do you take any  
3 continuing education courses?

4 THE WITNESS: Yes, ma'am, I do.

5 THE COURT: In hydrogeology?

6 THE WITNESS: Yes.

7 THE COURT: What did you take.

8 THE WITNESS: I take them usually through the  
9 Interstate Technology Research Council, ITRC.

10 You have the luxury of being able to take them  
11 on line but they are specifically to hydrogeology, and  
12 I've also taken several professional courses.

13 THE COURT: Okay.

14 Q In terms of your work experience as a hydrogeologist,  
15 do you have any work experience as a hydrogeologist?

16 A Yes.

17 Q Can you describe for the Court what that work  
18 experience is?

19 A It ranges from anything that has to do with  
20 groundwater, anything from evaluating the resource,  
21 pulling samples out, evaluating the sample results,  
22 defining plumes, addressing the plumes.

23 Q How many sites have you acted upon as a  
24 hydrogeologist on in your professional career?

25 A Over 150.



1 Q Of those 150 sites, how many of them involved some  
2 type of groundwater plume delineation?

3 A Literally every one of them.

4 Q Do you have any recent experience working in  
5 groundwater delineation?

6 A Yes.

7 Q Who is that with?

8 A The largest project that I worked on now is  
9 particularly relevant to this case.

10 THE COURT: Tell us what it is? We'll decide  
11 the relevance. You can't do everything.

12 THE WITNESS: I work, contracted to the Navy to  
13 work on a large plume that is about three miles west of  
14 this site.

15 THE COURT: It's determined to be a plume. You  
16 are not the one to delineate it, are you?

17 THE WITNESS: We're putting in our wells to try  
18 to define the plume.

19 THE COURT: Okay.

20 THE WITNESS: It's referred to the Navy Weapons  
21 Industrial Plant, Bethpage plume.

22 Q Are you the hydrogeologist that actually defines that  
23 plume, sir?

24 A Yes.

25 Q How many sites have you done similar work where

1 you've taken data and defined the plume?

2 A Like I said literally every one of the sites I've  
3 worked on.

4 Q Well, who are you currently employed by?

5 THE COURT: Didn't I ask you that? You have  
6 that.

7 Q What is your title?

8 A Senior hydrogeologist.

9 THE COURT: Any objection to him being delivered  
10 as an expert in hydrogeology?

11 MR. MULVIHILL: No, your Honor.

12 THE COURT: And a plume delineator.

13 MR. MULVIHILL: I have no objection to his  
14 experience as someone who is a professional in his  
15 professional capacity.

16 THE COURT: Very nice. Let's go forward.

17 Q Mr. Caldwell, what documents have you reviewed in  
18 preparation of rendering opinions in this case?

19 MR. MULVIHILL: Your Honor, excuse me for  
20 interrupting. Mr. Caldwell's proposed testimony however  
21 goes beyond hydrogeology and plume delineation.

22 THE COURT: How do you know that?

23 MR. MULVIHILL: Well, your Honor, because I  
24 think it -- I mean based on the defendant's summary  
25 judgment motion which relies on his affidavit which

1 includes many topics that were not listed --

2 THE COURT: Such as?

3 MR. MULVIHILL: Such as apportionment of CERCLA  
4 response costs.

5 THE COURT: Oh.

6 MR. MALDONADO: He did not do that in his  
7 affidavit.

8 THE COURT: Then he will not do it there either,  
9 is he, and he's not going to do it here.

10 MR. MALDONADO: On allocation, he will tell us  
11 what the size of the plumes are, yes.

12 THE COURT: Let's move along.

13 Go ahead.

14 Q I think there is a pending question. What documents  
15 have you reviewed in preparation for this testimony, sir?

16 A Many documents. Data from 1986 on to 2013. I  
17 concentrated on those that were more recent because  
18 typically in the environmental field, it's a sequential  
19 maturation of work and as each report builds on the other,  
20 it's an upside down pyramid.

21 THE COURT: This is really not helpful. Let's  
22 put it this way. As documents come in, you'll ask him if  
23 he reviewed them. Okay?

24 MR. MALDONADO: Fine.

25 Q Were you in the courtroom today when Mr. Dyber gave

1 his testimony?

2 A Yes.

3 Q Mr. Caldwell, can you generally describe how  
4 groundwater flows in the New Cassel Industrial area  
5 aquifer south of Old Country Road?

6 A It has been my determination it flows in the south  
7 southwest direction.

8 Q What is the basis for your determination?

9 A A number of the water level iso-contour maps.

10 Q Was there any other factors that led to your  
11 determination of groundwater flow?

12 A The plume configurations themselves.

13 Q First I'll start with the plume configurations, and  
14 I'll show you what has been marked figure 9. It is the  
15 plume diagram out of the OU-2 ROD.

16 A Okay.

17 Q And based on your review of that exhibit, are you  
18 able to generally tell the direction of groundwater flow  
19 in that area?

20 A Yes.

21 Q Could you explain to the Court how you would do this?

22 A This is fairly simple and straightforward.

23 THE COURT: Maybe I'll understand it. So go  
24 ahead.

25 THE WITNESS: This really is one of the simplest

1 ways to do it. So the groundwater itself moves from high  
2 to low just like surface water does, and the contaminants  
3 here are we call hydrofill which means they have a  
4 tendency to dissolve in water.

5 As a result, they dissolve in water fairly  
6 quickly and move along with the path of groundwater. So  
7 the methodology that we use this to determine the  
8 approximate direction of groundwater that flows, a  
9 centerline plume method. You can draw a line through the  
10 center of the plume dividing it equally on both sides to  
11 determine the approximate direction of the flow.

12 In this case the flow is moving along the center  
13 of the plume here (indicating.)

14 Q Okay, sir. Before I ask you some more questions,  
15 I'll show you another plume diagram, that's the deep plume  
16 that -- that is the DEC OU 3-ROD?

17 A Okay.

18 Q Based upon your plume flow direction method, how  
19 would groundwater have to flow to make that plume flow in  
20 that direction?

21 A Would have to flow in a southwest direction like  
22 that.

23 Q Could you draw across the plume the direction of the  
24 flow for it to be necessary to create that plume?

25 A May I say this is a misleading figure?

1 THE COURT: You mean the map?

2 THE WITNESS: Yes. Yes, map.

3 Q Could you draw a plume on that map?

4 A (Indicating.)

5 Q With respect to the figure of -- from the OU-2 ROD,  
6 can you draw a groundwater flow direction based upon the  
7 centerline plume method on that map?

8 A (Indicating).

9 Q Mr. Caldwell, have you examined the data contained in  
10 OU-2 concerning the sampling done to delineate that plume?

11 A Yes, I look at these data points along Old Country  
12 Road.

13 MR. MULVIHILL: Objection, your Honor. There is  
14 no mention of this data point in Mr. Caldwell's expert  
15 report.

16 MR. MALDONADO: It's a plume delineation, your  
17 Honor, fully disclosed to delineate the plumes.

18 THE COURT: Overruled. Go ahead.

19 Q You were saying, sir?

20 A Yes, I evaluated these.

21 Q And do you believe that plume as delineated by DEC  
22 consultant LMS is an accurate depiction of where that  
23 plume is north of Old Country Road?

24 A Yes.

25 (Continued.)

1 BY MR. MALDONADO (Cont'd):

2 Q. Can you, sir, get up on the map there, 3-2 and draw  
3 on the map, 3-2, where that plume enters the area south of  
4 Old Country Road.

5 MR. MULVIHILL: Objection.

6 Is he asking where it is or where it's his  
7 opinion?

8 THE COURT: I'm sorry?

9 MR. MALDONADO: I'm asking him to put the plume  
10 he just testified that his opinion was accurate to show  
11 where that comes south of Old Country Road on the map in  
12 3-2.

13 THE COURT: Yes, obviously his opinion.

14 MR. MULVIHILL: Okay.

15 (There was a pause in the proceedings.)

16 A. I agree with where 7 B previously went.

17 THE COURT: Sir, just do what you were asked to  
18 do.

19 BY MR. MALDONADO:

20 Q. I asked you to put where the plume in that exhibit  
21 goes south on Old Country Road on both sides, the east and  
22 west boundaries of that plume.

23 (There was a pause in the proceedings.)

24 MR. MULVIHILL: Your Honor, just renew my  
25 objection.

1           There was no plume delineation done by  
2   Mr. Caldwell himself.

3           THE COURT: That is understood, that is  
4   definitely understood.

5   BY MR. MALDONADO:

6   Q.   Mr. Caldwell, you are relying on the plume  
7   delineation done by New York State Department of  
8   Environmental Conservation in the OU 2 published ROD,  
9   correct?

10   A.   Correct.

11   Q.   Mr. Caldwell, I'm going to ask you to take a seat --  
12   actually, stay there, please.

13           I'm going to put up a number -- let's start with  
14   figure 6-1 from the 2000 LMS RI report. What is that  
15   document, sir?

16   A.   This is the -- this came from the RIFS, or OU 3.

17   Q.   What does this document show?

18   A.   This shows groundwater flowing from approximately  
19   here where 6 B is, flowing in a south, southwest  
20   direction.

21   Q.   And we had Mr. Dyber draw an inferred groundwater  
22   flow direction on that map?

23   A.   Yes.

24   Q.   Do you agree with the plume direction that he drew?

25   A.   Yes.



1 Q. In addition to this contour map, were there other  
2 contour maps done in the course of the evaluation of the  
3 eastern plume?

4 A. Yes.

5 There were two that were done during the 2009  
6 HDR preliminary design investigation report or evaluation.

7 Q. I'm going to show you the plume groundwater elevation  
8 contours from the 2010 HDR report.

9 Can you identify that document, sir?

10 A. Yes.

11 It came from the 2010 HDR PDI report.

12 Q. Can you identify on that report where well 6 B is  
13 located?

14 A. Right here.

15 Q. And can you, based upon the contours, draw a  
16 groundwater directional arrow on that map?

17 A. Yes.

18 (There was a pause in the proceedings.)

19 BY MR. MALDONADO:

20 Q. Sir, I'm going to show you figure 5 from the US EPA  
21 environmental response team report that's also in  
22 evidence.

23 Can you identify that document?

24 A. Yes.

25 That's from the 2009 Lockheed Martin -- is it --

1 Q. It's from the Lockheed Martin report, yes?

2 A. Yes, supplement RI --

3 Q. Are you sure it's the supplemental?

4 In any event, whatever the date is could you  
5 tell me what this map demonstrates?

6 A. This is a groundwater -- it's a contour map, and this  
7 is showing groundwater flow direction that's already been  
8 put on there by the report writer.

9 Q. Did you put that arrow on there, sir?

10 A. No.

11 Q. Who was put on there by?

12 A. That was put on there by the report writer.

13 Q. Whoever did this report for the EPA put the arrow?

14 A. Yes.

15 Q. And does that show the general south groundwater  
16 direction that was comparable to the other two maps you  
17 just saw?

18 A. Yes.

19 Q. What is sheet nine from the HDR DEC 2011 PDI show?

20 A. This shows the water level isocontour map.

21 Q. Could you draw the groundwater flow direction on that  
22 map, sir?

23 A. From which origination point?

24 Q. From the point where Frost Street monitoring well 6  
25 is.

1 (There was a pause in the proceedings.)

2 BY MR. MALDONADO:

3 Q. And the last one is another groundwater profile  
4 elevation map from the HDR DEC 2011 report.

5 I ask you to draw the same groundwater flow  
6 arrow on that map, sir.

7 (There was a pause in the proceedings.)

8 BY MR. MALDONADO:

9 Q. You can take the stand again, sir.

10 (Witness resumes the stand.)

11 BY MR. MALDONADO:

12 Q. The groundwater profile contour elevation maps you  
13 drew the arrows on, who were they prepared by?

14 A. They were prepared by the various report authors.

15 Q. For the DEC?

16 A. Yes.

17 Q. For the EPA?

18 A. Yes.

19 Q. Did you prepare any of those groundwater profile  
20 elevation contour maps?

21 A. No.

22 Q. Were they prepared for different times periods?

23 A. Yes.

24 Q. What's the span of the time periods?

25 A. From 2000 to 2013.

1 Q. At any point between 2000 and 2013, have you noticed  
2 a variation in the groundwater flow direction originating  
3 from Frost Street monitoring well 6?

4 A. No.

5 Q. Through the source area?

6 A. No.

7 Q. It's remained consistent?

8 A. Yes.

9 Q. I'm going to ask you, sir, to step back up to figure  
10 3-2.

11 MR. MULVIHILL: Your Honor, may I sit in the  
12 jury box?

13 THE COURT: Sure.

14 (Witness steps down.)

15 BY MR. MALDONADO:

16 Q. Using a center plume approach, Mr. Caldwell, I'm  
17 going to ask you to mark with the green Sharpie in the  
18 Frost Street eastern plume as delineated on 3-2, using a  
19 center plume approach where would the groundwater flow  
20 direction be?

21 (There was a pause in the proceedings.)

22 BY MR. MALDONADO:

23 Q. Is that groundwater flow direction arrow that you  
24 just drew consistent with the groundwater flow of  
25 direction you drew based upon the groundwater elevation

1 contours that we just showed you in the five prior  
2 exhibits?

3 A. Generally, yes.

4 It has a small curve more to the south in the  
5 bottom part.

6 Q. Is the groundwater flow direction you drew on those  
7 five diagrams and the plume in figure 3-2 consistent with  
8 the groundwater direction in the figure from the OU 3 ROD  
9 at figure 7?

10 A. No.

11 Q. Why not?

12 A. This is much more to the southwest.

13 Q. Are you aware of any data in this case that supports  
14 a groundwater flow in that direction?

15 A. No, I'm not.

16 Q. Mr. Caldwell, I'm going to ask you to take a look at  
17 figure 3-2.

18 Do you recognize where the eastern plume is  
19 delineated on that map?

20 A. Yes.

21 Q. Do you know what levels that plume is delineated down  
22 to?

23 THE COURT: You mean the depth?

24 MR. MALDONADO: The levels of concentration,  
25 your Honor.

1 THE COURT: Okay.

2 A. Yes.

3 This is delineated down the 5 PPB.

4 Q. How do you know that, sir?

5 A. Well, for one thing you can do a comparative analysis  
6 between this and the map that was done in the EPA OU 3  
7 ROD, which utilizes this same set of data, and you can  
8 also do a comparative analysis between this and the  
9 HDR PDI 2010 report which is based on the same set of  
10 data.

11 And there is a distinct difference between this  
12 map and those.

13 Q. Is this lap mislabeled in terms of the detection or  
14 the plume delineation levels?

15 A. Yes.

16 There is --

17 THE COURT: This map isn't right according to  
18 you and the other map isn't right according to you?

19 THE WITNESS: What's missing on this map is part  
20 of the legend is missing.

21 It's truly a reproduction error.

22 THE COURT: So it's not the map itself, you are  
23 not saying the map is wrong, you are saying the legend is  
24 missing from it?

25 THE WITNESS: Yes, ma'am.

1           MR. MALDONADO: The legend, your Honor, states  
2     it's delineated down to 100 parts per billion, and the  
3     contours are 5 parts per billion, and that's why he is  
4     saying the legend is wrong.

5           We will have a witness come who drew that map to  
6     say that.

7           THE COURT: Okay.

8     BY MR. MALDONADO:

9     Q.   What does this figure 3-2 depict?

10    A.   Well, this depicts the four plumes that have been  
11    identified, the eastern, the unnamed, the central plume  
12    and the western plume.

13    Q.   What levels does it depict the plumes to?

14    A.   To 5 parts per billion.

15    Q.   The western edge of depicted plumes are drawn in  
16    solid lines.

17           What does that indicate to you?

18    A.   That is based on deduction, and it's based on solid  
19    control points that allow you to make that deduction.

20    Q.   What do you mean by that, sir?

21    A.   Well, you are able to determine and feel confident  
22    that you have the edge of the plume delineated.

23    Q.   Then you would draw a solid line?

24    A.   Yes.

25    Q.   And if you don't feel confident that you have it

1 fully delineated, how would you draw it?

2 A. You would dash the lines.

3 Q. The eastern edge of the eastern plume is drawn with  
4 dash lines, is that correct?

5 A. Correct.

6 Q. You referenced a term called control points, what do  
7 you mean by that, sir?

8 A. Those are wells that we use to measure water levels  
9 in.

10 And that allows us to create those --

11 THE COURT: When you say we and us, you are  
12 talking about hydrogeologists.

13 THE WITNESS: Yes.

14 A. That a hydrogeologist will use to create a water  
15 level isocontour map.

16 Q. I'm talking about control points with respect to  
17 delineation of plumes.

18 A. Okay.

19 Q. What is a control point?

20 A. That is a well in which we can collect a sample from,  
21 and analyze it for the chemicals that are in it.

22 Q. And in a typical environmental investigation, how do  
23 you do that?

24 A. You drill a well. You develop the well.

25 You put a sampling device inside the well and



1 you extract a sample of groundwater out.

2 Q. Then you take it to a laboratory?

3 A. Take it to the laboratory.

4 Q. And the data ends up on a map?

5 A. Correct.

6 Q. And based upon the data you are able to draw a plume  
7 area.

8 Is that a correct statement?

9 A. Correct.

10 Q. Which control points, sir, do you deem relevant in  
11 this case with respect to the eastern plume?

12 A. 7 B -- well, they are all important.

13 Some are important for what's inside the plume  
14 and some are important for what's outside the plume.

15 Q. Which well points are important for what's on the  
16 outside?

17 A. 7 B for the outside of the plume, MW 15 for the  
18 outside of the plume, MW 17 S for the outside of the  
19 plume, MW 16 S, MW 16 D for the outside of the plume.

20 FSMW 14 C, FSMW 14 B, FSMW 14 A for the inside  
21 of the plume, FSMW 13 A, FSMW 13 B and FSMW 13 C for the  
22 inside of the plume.

23 TMW-7 for the inside of the plume and W-14 for  
24 the inside of the plume, EX 1 for the inside of the plume,  
25 and MW 17 D for the inside of the plume.

1 Q. Have you reviewed the data from all those wells, sir?

2 A. Yes.

3 MR. MULVIHILL: Just restate my objection that  
4 there is no discussion of Frost Street monitoring well 7 B  
5 in the expert reports.

6 MR. MALDONADO: He talks about delineation of  
7 plumes based upon all available data, your Honor,  
8 certainly 7 B is available data.

9 MR. MULVIHILL: Your Honor, in his report he  
10 lists a number of specific wells that he used as control  
11 points and Frost Street monitoring well 7 B is not  
12 specifically identified.

13 THE COURT: The objection is sustained.

14 BY MR. MALDONADO:

15 Q. Mr. Caldwell, based upon the control points that you  
16 identified other than 7 B, are you able to have an opinion  
17 on whether or not the plume, the eastern plume as drawn on  
18 that map is an accurate delineation of the eastern plume?

19 A. I think it is.

20 Q. Why do you think it is?

21 A. Because of the groundwater flow directions.

22 Q. Anything else?

23 A. The groundwater flow directions that we have just  
24 gone through on five or six of these maps all indicate  
25 that flow is towards the south.

1 So understanding --

2 THE COURT: Excuse me.

3 You are basing your decision on the way the  
4 water flows to determine that the plume delineation is  
5 accurate?

6 THE WITNESS: Yes, ma'am.

7 THE COURT: As opposed to finding that the plume  
8 delineation is accurate the reverse?

9 THE WITNESS: Yes, ma'am.

10 THE COURT: Okay.

11 BY MR. MALDONADO:

12 Q. And you determined whether the plume delineation  
13 based on data is accurate?

14 THE COURT: Correct me if I'm wrong, I think  
15 this is in response to what I asked you, are you basing it  
16 on the fact that it shows that the water is flowing south  
17 and, therefore, you are saying the plume delineation is  
18 correct?

19 Is that what you are asking him? Which came  
20 first.

21 MR. MALDONADO: Right.

22 BY MR. MALDONADO:

23 Q. Let's take the judge's guidance on this, before you  
24 can determine whether the plume direction is consistent  
25 with groundwater flow, you had to put the plume on the

1 map?

2 A. Yes.

3 Q. Correct?

4 A. Yes.

5 Q. And that was done based upon data points?

6 A. Yes.

7 Q. Based upon the data points you have reviewed, is the  
8 plume, eastern plume accurately drawn on sheet 3-2 that  
9 you are looking at right now?

10 A. Yes.

11 Q. Yes?

12 A. Yes.

13 Q. Once it was placed on the map, the groundwater flow  
14 direction confirms for you that it is, in fact, drawn in a  
15 manner that's consistent with groundwater flow?

16 MR. MULVIHILL: Objection, leading.

17 THE COURT: Sustained.

18 BY MR. MALDONADO:

19 Q. Is the map --

20 THE COURT: Off the record.

21 (Discussion held off the record.)

22 THE COURT: Go ahead.

23 BY MR. MALDONADO:

24 Q. Is the eastern plume as drawn on the map in front of  
25 you consistent with groundwater flow in the area?

1 A. Yes.

2 Q. Based upon what you have testified to today, do you  
3 have an opinion, sir, as to whether the eastern plume is  
4 separate and distinct from all other plumes identified on  
5 that map?

6 A. I believe it is.

7 Q. You believe that it is --

8 A. I believe that it is separate and distinct.

9 Q. And what is your opinion based upon, sir?

10 A. The delineation of the plume, the groundwater flow,  
11 the data.

12 Q. Based upon the data that existed in 2003, sir, would  
13 have been to delineate that plume like it is on that map  
14 today?

15 A. No.

16 Q. Why not?

17 A. Because there was none of these wells that were  
18 important to the interior of the plume that had been  
19 drilled yet.

20 Q. And after the 2011 HDR investigation, all the data  
21 was then available?

22 A. Correct.

23 Q. And that's when HDR drew this map?

24 A. They drew this in 2011, yes.

25 Q. Mr. Caldwell, you have rendered an opinion as to the

1 distance between the eastern plume and central plume.

2 A. Correct.

3 Q. Do you know what the distance between the delineated  
4 eastern plume and central plume is?

5 A. Approximately 1,200 feet, as I recall.

6 Q. And what is that based upon, sir?

7 A. That was just purely a linear measurement from -- it  
8 was based on this map, and the delineation shown on this  
9 map.

10 So it was a linear measurement from the edge of  
11 the five PPB in the eastern plume to the eastern side of  
12 the five PPB plume on the central plume.

13 Q. Do you have an opinion, sir, as to the distance  
14 between the southern extent of the eastern plume and the  
15 southern extent of the central plume?

16 A. That's in my opinion.

17 I'll have to look at that.

18 Q. Feel free to, sir.

19 (There was a pause in the proceedings.)

20 A. They were approximately 3,700 feet apart for PCE and  
21 3,800 feet apart for TCE.

22 MR. MALDONADO: Judge, may I approach the bench?

23 THE COURT: Sure.

24 (Discussion held off the record.)

25 BY MR. MALDONADO:

1 Q. Mr. Caldwell, I'm going to show you figure 3-3 from  
2 the HDR O'Brien Gere July -- July 2013 supplemental  
3 feasibility study memorandum.

4 Can you tell me what that diagram represents?

5 A. That's the delineation of TCE.

6 Q. With respect to this figure, we have asked you a  
7 series of questions about the PCE groundwater flow and the  
8 validity of the delineation.

9 Would the same answers you gave for the PCE  
10 plume apply to the TCE plume?

11 A. Yes.

12 Q. In terms of the separation between the northern part  
13 of the TCE plume for the eastern plume and the central  
14 plume, how far is the distance?

15 A. Approximately 1,200 feet.

16 Q. And for the southern extent of the two plumes?

17 A. 3,800 feet for TCE.

18 Q. Mr. Caldwell, have you rendered an opinion in this  
19 case as to whether or not the eastern plume has impacted  
20 the Bowling Green well fields?

21 A. I have.

22 Q. And what is your opinion?

23 A. My opinion is that they have not.

24 Q. What is the basis of your opinion?

25 A. The water level flow maps are probably the strongest

1 line of evidence.

2 Q. Do the data points also support it?

3 MR. MULVIHILL: Objection; leading.

4 THE COURT: Sustained.

5 BY MR. MALDONADO:

6 Q. Is there any other evidence that supports the -- your  
7 opinion that the eastern plume is not impacting the  
8 Bowling Green well fields?

9 A. The chemical ratios of PCE to TCE is remarkably  
10 different in the Bowling Green wells than it is in the  
11 eastern plume wells on average.

12 Q. I'm going to ask you to take a look at 3-2.

13 Can you identify on that map where the intake  
14 wells are for the Bowling Green district.

15 THE COURT: Intake?

16 A. You want me to draw one?

17 Q. If you could circle it and put a BG on it, please.

18 (There was a pause in the proceedings.)

19 BY MR. MALDONADO:

20 Q. What are those wells, sir?

21 A. Public water supply wells.

22 THE COURT: Public what?

23 THE WITNESS: Public water supply wells.

24 BY MR. MALDONADO:

25 Q. Those are the wells where the water is drawn from to



1 provide public water?

2 A. Correct.

3 Q. What are the depths of those wells?

4 A. Those depths range from 478 feet at the shallowest  
5 top of the well, to 586 feet, as I recall, that's the  
6 deepest point.

7 Q. And are they outside the area that's been delineated  
8 as the 5 part per billion level of the eastern plume?

9 A. Yes.

10 Q. You have looked at data in this case dating back from  
11 1998, is that correct?

12 A. Correct.

13 Q. Have you seen anything in the data from 1998 to  
14 present that would lead you to believe the plumes  
15 delineated in drawing 3-2 should be drawn differently?

16 A. No.

17 Q. You have been asked to calculate the relative plume  
18 sizes between the eastern plume and the central plume.

19 Do you have an opinion as to how big the plumes  
20 are?

21 A. Yes.

22 Q. How big is the eastern plume?

23 A. For which constituent?

24 Q. For PCE.

25 A. 23.41 acres.

1 Q. And PCE is the biggest plume size delineation on the  
2 eastern plume.

3 Is that correct?

4 A. Correct.

5 Q. What's the biggest plume size contaminant on the  
6 central plume?

7 A. Well, the central and the western plumes are  
8 commingled.

9 So I calculated the area for the central and the  
10 western together.

11 Q. What was the acreage calculation for the central and  
12 western?

13 A. For which constituent?

14 Q. However you calculated it, sir.

15 A. For PCE it was 102.94 acres, for TCE it was 122.65.

16 Q. And did you do a calculation relative to the  
17 comparative size of the western plume, central plume  
18 versus the eastern plume?

19 A. Yes.

20 Q. What was that calculation?

21 A. Well, what I did there was realize that the --  
22 recognizing that the primary contaminant and the one that  
23 encompassed the most area in the eastern plume was PCE and  
24 likewise the primary contaminant and the one that  
25 comprised the most area in the combined central and

1 western plumes were TCE.

2 So I calculated the area for -- of TCE and the  
3 central and western plume, and calculated the volume or  
4 the area for PCE in the eastern plume and used that as  
5 unity to determine what relative percentages were.

6 Based on that, the eastern plume comprises 16  
7 percent of that unity or impacts, overall impacts to the  
8 groundwater, and the central and western plume comprises  
9 84 percent of the impacts.

10 Q. Did you take into consideration relative  
11 concentrations of contamination in your calculation of  
12 plume areas?

13 A. Yes.

14 As I just thought I explained, I took the  
15 primary contaminant, the contaminant that comprised the  
16 largest area in each one of those plumes and used that as  
17 a normalization technique.

18 Q. Thank you, sir.

19 THE COURT: No further questions?

20 MR. MALDONADO: No further questions, your  
21 Honor.

22 THE COURT: Go ahead.

23 Who will be your next witness?

24 MR. MALDONADO: Mr. Connors is my next witness  
25 and he is scheduled to be here first thing in the morning,

1 your Honor.

2 THE COURT: We are not going first thing in the  
3 morning.

4 Go ahead.

5 MR. MULVIHILL: I'm not sure that I will be able  
6 to finish today.

7 THE COURT: Okay.

8 MR. MULVIHILL: I'll try.

9 THE COURT: Really I want to give you a break.  
10 You want to take the ten minutes now and then  
11 we'll go to 4:30? I don't know what you want to do? You  
12 want to go to 4:30?

13 MR. MULVIHILL: Go to 4:30 and take a break?

14 THE COURT: No.

15 I'll do it any way you want. It's a bench  
16 trial. I have a lot of flexibility. I don't have to  
17 worry about a jury.

18 MR. MULVIHILL: A ten-minute break would be, I  
19 think, beneficial, your Honor.

20 THE COURT: Okay.

21 And then we'll go until about 4:30. You will  
22 find a good place to break and that will be it.

23 MR. MULVIHILL: Yes.

24 THE COURT: And tomorrow we will begin at 12.

25 MR. MULVIHILL: Okay.

1 MR. MALDONADO: Your Honor, the schedule after  
2 tomorrow you said --

3 THE COURT: Nothing on Wednesday -- well, I have  
4 to wait and see.

5 You think you will finish your case tomorrow, am  
6 I correct?

7 MR. MALDONADO: I believe so, yes.

8 THE COURT: All right.

9 This may come as a shock to you, but there may  
10 be motions made at the close of your case. So that will  
11 determine the schedule for Thursday.

12 MR. MALDONADO: Okay.

13 THE COURT: As of now I would anticipate 10 to 2  
14 or 3, or something like that, and we don't meet on Friday.

15 So let's take a quick break.

16 MR. MULVIHILL: Your Honor, while we are on the  
17 topic, and tomorrow's proceedings, Mr. Maldonado had  
18 subpoenaed a DEC employee named Maura Zepetelli.

19 He indicated to me either last week or the week  
20 before Ms. Zepetelli would be asked to testify on Tuesday  
21 and we have arranged to have her be here on Tuesday.  
22 Ms. Zepetelli is the --

23 THE COURT: You mean tomorrow?

24 MR. MULVIHILL: Tomorrow.

25 She's the sole care giver for her mother who is,

1 I believe, very ill and requires care.

2 THE COURT: We can take her out of order if  
3 nobody has an objection.

4 MR. MALDONADO: I don't have an objection, your  
5 Honor.

6 MR. MULVIHILL: Thank you.

7 THE COURT: All right.

8 Let's take ten and then wrap up for the day.

9 (Recess.)

10 (Continued on next page.)

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1 (Following a recess.)

2 THE COURT: All right.

3 CROSS-EXAMINATION

4 BY MR. MULVIHILL:

5 Q. Good afternoon, Mr. Caldwell.

6 I'll reintroduce myself. I'm Dan Mulvihill from  
7 the New York State Attorney General's office.

8 We talked briefly about the aerial calculation  
9 we just discussed and might come back to that later today  
10 or tomorrow. Did you do that aerial calculation yourself?

11 A. No, I did not.

12 Q. Who did?

13 A. GIS operator.

14 Q. And who did that GIS operator work for?

15 A. Can you repeat the question?

16 Q. Sure.

17 Who did the aerial calculation?

18 A. GIS operator.

19 Q. And what is his or her name?

20 A. Alex Troika.

21 Q. Is it Ms. or Mr. Troika?

22 A. It's Ms. Stark now, she got married, same person,  
23 though.

24 Q. And for whom did she work?

25 A. EnSafe, E-N-S-A-F-E.

1 Q. Does Ms. Stark work on the OU 2, the Frost Street OU  
2 2 project for EnSafe?

3 A. Yes.

4 Q. What does EnSafe do for the Frost Street defendants  
5 in the OU 2?

6 A. I'm not entirely sure the whole scope of work.

7 I do know that we maintain the soil vapor  
8 extraction system.

9 Q. Do you know how long EnSafe has been working on OU 2  
10 for the Frost Street defendants?

11 A. I do not.

12 Q. Do you know how many employees are working, how many  
13 EnSafe employees are working on the Frost Street OU 2  
14 project?

15 A. I'd say at any given time between one and five.

16 Q. Mr. Caldwell, do you have your March 16, 2015 expert  
17 report in front of you?

18 A. I do.

19 Q. Can you turn to page eight of your March 16th report.

20 A. I have it.

21 Q. In your report you state that the chemical signature  
22 of the eastern plume is higher ratios of PCE to TCE?

23 A. Correct.

24 Q. And that's your opinion?

25 A. Correct.



1 Q. Is there a chemical signature for the central plume  
2 in your opinion?

3 A. Yes.

4 Q. What is that?

5 A. TCE is -- comprises a higher percentage -- or TCA,  
6 I'm sorry -- comprises a higher percentage relative to the  
7 other two components.

8 Q. In the eastern plume you say that there's a higher  
9 ratio of PCE to TCE.

10 Do you know generally what that ratio is?

11 A. I calculated an average out to 205 feet and it was  
12 26.4.

13 Q. So on average there was 26.4 times more PCE than TCE  
14 in the eastern plume?

15 A. If you wanted to put it into a ratio, 26.4 divided by  
16 1, yes.

17 Q. Thank you.

18 What wells did you consider when you looked at  
19 this calculation?

20 A. I tried to get all of them that were sampled.

21 Q. Sampled in the eastern plume?

22 A. Yes.

23 Q. And that's the eastern plume as depicted on the HDR  
24 figure?

25 A. Yes.

1 I used the data that was used to construct that  
2 map.

3 Q. So that was based on the 2011 --

4 A. 2011, there's two sets of data on that map.

5 There's the 2009 data that Dvirka Bartilucci  
6 presented for the temporary monitoring wells and there is  
7 the data that HDR sampled and reported in 2011.

8 Q. Earlier you were asked about wells that you used as  
9 control points in forming your opinion as to the current  
10 delineation of the eastern plume.

11 I believe that those wells were monitoring  
12 well -- other than the one that I objected to, monitoring  
13 well 15, monitoring well 16 S and 16 D, monitoring well 17  
14 S, the Frost Street well -- Frost Street monitoring well  
15 14 and 13, TMW 7, MW 14, EX 1 and monitoring well 17.

16 Were there any others that you considered?

17 A. In terms of control points?

18 Q. Control points but delineating the eastern plume?

19 A. I also considered the other two wells on the north  
20 side of Old Country Road, 6 and 5, 6 B and 5 B.

21 Q. Can you turn to page seven of the March 16, 2015  
22 report.

23 There is a series of bullet points on the bottom  
24 half of that page. I'll read the first one:

25 I agree with the interpretation of the western

1 boundary of the eastern plume PCE plume. There are five  
2 sample points MW 9, MW 16 S, MW 15, EW 1 B and EW 1 C,  
3 between the eastern and central plumes that are nondetect,  
4 MW 16 is only 2.7 PPB. All of these results demonstrate  
5 the separation between the eastern and central plumes.

6 Is that a correct statement of your opinion in  
7 your report?

8 A. I wrote this in the report, yes.

9 Q. So you included in your opinion EW 1 B and EW 1 C as  
10 well, correct, but you didn't identify those when you were  
11 asked by Mr. Maldonado.

12 A. I did not.

13 Q. Just for clarification, talk about what you said the  
14 nondetect in EW 1 B.

15 Is that correct?

16 A. No, it's not.

17 Q. What was the actual detection?

18 A. 1.9, as I recall.

19 Q. Right, but that doesn't change your opinion, even  
20 though --

21 A. I'm not using that well for my delineation.

22 Q. Is it your opinion that the eastern PCE plume is not  
23 present at MW 9, MW 16 S and MW 15 because of either  
24 nondetect samplings or samplings below the MCL?

25 A. Can you restate the question?

1 I'm sorry.

2 Q. Sure.

3 Let me break it down into individual wells. Is  
4 it your opinion that the eastern plume does not extend to  
5 the area of MW 9 because of the nondetect for PCE in that  
6 well in 2011?

7 A. Correct.

8 Q. And is it your opinion that the eastern plume does  
9 not extend to the vicinity of monitoring well 16 S or 16  
10 D, which are the same location because of a nondetect in  
11 16 S and a detection in 16 D that is below the state MCL?

12 A. Correct.

13 Q. I don't know if this is conversely or inversely, I  
14 always get that confused, but is it also your opinion that  
15 the eastern plume PCE plume is present in the vicinity of  
16 Frost Street monitoring well 14 A because of a detection  
17 of PCE above the state MCL?

18 A. Yes.

19 Q. And that would also be your opinion for impacts at  
20 EX 1?

21 A. Yes.

22 Q. And at Frost Street monitoring well 13, A, B, and C?

23 A. Yes.

24 Q. Is it your opinion that the central plume is  
25 presently in the vicinity of MW 6 because PCE was detected

1 at levels above the MCLs there in 2011?

2 A. The central plume?

3 Q. Yes, the central plume.

4 THE WITNESS: Permission to look at the map,  
5 your Honor?

6 THE COURT: Yes. Go ahead.

7 MR. MULVIHILL: Yes, absolutely.

8 (Witness steps down.)

9 A. Yes, that's correct.

10 Q. And, similarly, is it your opinion that the central  
11 plume is in the vicinity of MW 1 because PCE was detected  
12 at levels above the MCL in 2011?

13 A. Correct.

14 Q. Is it your opinion that PCE -- that the unnamed PCE  
15 plume, you see that, is present at the location of TMW 6  
16 because PCE was detected there above the MCL?

17 A. Correct.

18 Q. You can sit down. Thank you.

19 (Witness resumes the stand.)

20 BY MR. MULVIHILL:

21 Q. Based on the testimony that you just gave, is it safe  
22 to say that it's your opinion that a plume of PCE exists  
23 where PCE is present at levels above 5 parts per billion  
24 MCL?

25 A. There are separate plumes that are present because of

1 the levels of PCE, yes.

2 Q. But generally there is a plume at those locations  
3 because there is a detection of PCE above the 5 part per  
4 billion standard?

5 A. Correct.

6 Q. And it might be one plume or another, but there is a  
7 plume there.

8 THE COURT: Correct?

9 THE WITNESS: Correct.

10 BY MR. MULVIHILL:

11 Q. You also state in your opinion that the nondetect at  
12 MW 15 is -- demonstrates the separation between the  
13 eastern and central plumes.

14 Is that correct?

15 A. Correct.

16 Q. How many times was MW 15 sampled?

17 A. Once.

18 Q. And when was that?

19 A. In 2011.

20 Q. So there is no data regarding the presence of PCE at  
21 that location prior to 2011?

22 A. No.

23 Q. And the same question with respect to TCE?

24 A. No.

25 Q. And how about TCA?

1 A. No.

2 Q. Have you seen any data that shows whether the eastern  
3 plume was present or not at this location in 2002?

4 A. No.

5 Q. How about 2004?

6 A. No.

7 Q. Or 2008?

8 THE COURT: It wasn't or you haven't seen any  
9 indication?

10 THE WITNESS: I have seen no indication in the  
11 first data that I saw.

12 THE COURT: I understand.

13 BY MR. MULVIHILL:

14 Q. Do you know when --

15 MR. MULVIHILL: Withdrawn.

16 BY MR. MULVIHILL:

17 Q. Do you know what contaminants have been identified in  
18 the Bowling Green wells?

19 A. PCE and TCE carbon tetrachloride and I do believe  
20 there -- I think there was some TCA in it as well.

21 Q. Do you know when these contaminants of concern were  
22 first detected in the Bowling Green wells?

23 A. I don't know the exact time frame.

24 I believe that the EW 1 wells were put in in  
25 response to concerns by the New York State Department

1 of --

2 THE COURT: Sir, the question is do you know?

3 THE WITNESS: No.

4 BY MR. MULVIHILL:

5 Q. What depth was MW 15 screened at?

6 A. 185 to 205.

7 Q. Was it screened at any other depths?

8 A. No.

9 Q. So you don't know if there is any PCE present in  
10 groundwater at MW 15 above 185 feet?

11 A. I have no reason to believe there is.

12 Q. But you don't have any data that suggests there  
13 isn't?

14 A. I cannot say with a reasonable degree of scientific  
15 certainty.

16 Q. But isn't it possible that the eastern plume could  
17 extend to the location of MW 15 at a depth other than the  
18 185 to 200?

19 A. In my opinion it's unlikely.

20 Q. But is it possible?

21 A. I can't say that with any reasonable degree of  
22 scientific certainty.

23 MR. MULVIHILL: One second, your Honor.

24 (There was a pause in the proceedings.)

25



1 BY MR. MULVIHILL:

2 Q. Mr. Caldwell, were you deposed in this litigation?

3 A. Yes, sir.

4 Q. Do you recall being deposed?

5 A. Yes, sir.

6 Q. Do you recall that you were under oath?

7 A. Yes, sir.

8 Q. During that deposition?

9 A. Yes, sir.

10 Q. Can you turn to page 38 of that transcript that I  
11 handed to you -- first of all, if you look at the front  
12 page, towards the bottom, it says Examination Before Trial  
13 of Brian Caldwell.

14 You see that?

15 A. Yes.

16 Q. And it says May 20, 2015 at 10 a.m.

17 Do you recall that generally being the date of  
18 your deposition?

19 A. Yes.

20 Q. I ask you to turn to page 38 now, specifically at  
21 line 6.

22 THE COURT: 30 what?

23 MR. MULVIHILL: Line 6.

24 THE COURT: What page?

25

1 BY MR. MULVIHILL:

2 Q. I asked you --

3 THE COURT: Sir, what page?

4 MR. MULVIHILL: Page 38, line 6.

5 BY MR. MULVIHILL:

6 Q. The question I asked you is:

7 Is it possible that the eastern plume could  
8 extend to MW 15 at different depths?

9 Mr. Maldonado objected.

10 And you answered: yes, it's possible.

11 Is that your answer then?

12 A. That was my answer then.

13 Q. Thank you, very much.

14 MR. MULVIHILL: Your Honor, it's 4:27. This is  
15 probably a good time.

16 THE COURT: Works for me.

17 I have a lot more work in the office. I'll see  
18 you tomorrow at 12.

19 MR. MALDONADO: Just one point, Judge, before we  
20 go.

21 THE COURT: Sure.

22 MR. MALDONADO: Frost Street monitoring well 7,  
23 I found the locations and documents that are in evidence  
24 on consent where the '98, 2000, et cetera, data are in the  
25 record from something other than the --

1 THE COURT: And you want to do what?

2 MR. MALDONADO: It's in the record already.

3 I don't know that our dispute over the exhibit  
4 that's been denied access is worth pursuing but I'm  
5 telling you it's in the record already in other places.

6 THE COURT: Okay.

7 Thank you. This order on consent, did  
8 someone -- I'm sorry, never mind. It's an exhibit to  
9 something. Thank you, all.

10 I'll see you tomorrow at 12.

11 MR. MALDONADO: Judge, is there a place we can  
12 leave some of our exhibits up here?

13 THE COURT: I would think you can leave  
14 everything.

15 Nobody's going to touch anything. Everyone in  
16 here has more papers than they know what to do with it.

17 MR. MALDONADO: I just don't want to interrupt  
18 your courtroom.

19 THE COURT: I am working around you.

20 So I'm doing you at 12, and then at 4 o'clock  
21 I'm doing the rest of the cases. You are my primary focus  
22 this week.

23 MR. MALDONADO: Thank you, your Honor.

24 THE COURT: Of course, if you go into next week  
25 my attention span might drag.

1                   So I'll see you tomorrow at 12. Thank you.

2                   MR. MULVIHILL: Thank you, Judge.

3                   (The trial was adjourned until Tuesday, April  
4 12th, 2016, at 12 p.m.)

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UNITED STATES DISTRICT COURT  
EASTERN DISTRICT OF NEW YORK

- - - - - X

STATE OF NEW YORK, et al.,

06-CV-1133

Plaintiff,

-against-

United States Courthouse  
Central Islip, New YorkNEXT MILLENNIUM REALTY, LLC,  
et al.,

April 12, 2016

Defendants.

1:00 p.m.

- - - - - X

TRANSCRIPT OF PROCEEDINGS  
BEFORE THE HONORABLE SANDRA J. FEUERSTEIN  
UNITED STATES DISTRICT JUDGE

## APPEARANCES:

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Transcript produced by computer.Mary Ann Steiger, CSR  
Official Court Reporter



THE COURT: I understand that there's a settlement of the matter?

MR. MULVIHILL: Your Honor, Daniel Mulvihill, for the State of New York.

We have reached an agreement with the remaining Frost Street defendants.

The Frost Street defendants will pay to the State a total amount of \$700,000 in three payments. The first payment will be \$250,000 within --

MR. MALDONADO: Within 30 days of the filing of the approved consent order.

MR. MULVIHILL: The parties will submit a consent order for your approval which will give them contribution protection and other rights.

The release, the State will release the Frost Street defendants for all claims resulting and relating to the State's past response costs for operable unit 3 of the New Cassel industrial area, and will also give the Frost Street defendants a release for natural resource damages.

The consent order will also allow the State to reopen the case to assert claims for future costs against the Frost Street defendants should the United States bring claims against the State for a 10 percent share of costs.

This is consistent with the other consent decrees that were approved by the Court, the other



settlements that we reached.

THE COURT: We can't have it subject to forever.

MR. MULVIHILL: I think what we did before, your Honor, is that they were severed and administratively closed.

MR. MALDONADO: I think, Judge, you can close the case, but it would be carved out of the consent or the right to pursue those claims.

THE COURT: I know. That's what I'm going to tell you.

I will close this case subject to the filing of another case on the other two without the necessity for paying the filing fees or anything of that nature; is that all right?

MR. MULVIHILL: Yes.

THE COURT: Of course it's all right with you.

MR. MULVIHILL: I would state that the release that the State will give to the Frost Street defendants will not include or will not extend to any claims for costs incurred by the State at operable unit 2 at the Frost Street sites.

MR. MALDONADO: To clarify, Judge, there's operable unit 2 which is spelled out in the RODs and consent orders, and there's a dispute as to whether a deeper portion of that is operable unit 2. Both sections



of the environment would be excluded from the release.

THE COURT: Off the record.

(A discussion is held off the record.)

MR. MULVIHILL: Also, one other thing.

The parties had agreed that the consent order would address the parties' ability to bring new claims at the appropriate time, whether that included a tolling agreement --

THE COURT: Subject to standard motions for dismissal and any other remedy that the defendants might seek.

MR. MULVIHILL: One second, please.

(Pause in proceedings.)

THE COURT: Anything further?

MR. MULVIHILL: No, your Honor.

THE COURT: We're going to administratively close this based on your consent decree. You can file the other case, but then it will require a new filing fee.

MR. MULVIHILL: Thank you, your Honor.

THE COURT: Hopefully the State won't be bankrupt.

Thank you all.

MR. MALDONADO: Thank you, your Honor.

THE COURT: Submit the papers for me.

MR. MALDONADO: Thank you.





MR. MULVIHILL: Thank you, your Honor.

(Proceedings in this matter are concluded.)

